SF
C58
#720
DRAFT
11-16-94

TRANSPORTATION ELEMENT

OF THE
COMPREHENSIVE PLAN OF THE CITY AND COUNTY OF SAN FRANCISCO

DRAFT FOR CITIZEN'S REVIEW

The Planning Department
of the City and County of San Francisco

November 16, 1994

DOCUMENTS DEPT.
DEC 14 1994
SAN FRANCISCO
PUBLIC LIBRARY

D

REF
388.4097
T6875d

DOCUMENTS DEPT.
DEC 13 1994
SAN FRANCISCO
PUBLIC LIBRARY

December 7, 1994

THE TRANSPORTATION ELEMENT: DRAFT FOR CITIZEN'S REVIEW
SIGNIFICANT ADDITIONS AND DELETIONS

These page-by-page notes call attention to and explain **significant** additions and deletions to the text of the Nov. 16, 1994 draft of the *Transportation Element* as it is proposed to be modified.

Additions are shown in redline, except when the entire section is new, as is the case for Regional, Congestion Management, and Urban Goods Movement).

Deletions are shown in ~~strikeout~~

Comments in general:
New organization of Element reflects the importance of Congestion Management (incl. Transit First, Air Quality): Order of following sections relate to establishment of street hierarchies based on function of streets to enhance comprehension. For example, knowing the classification of streets as they are used by automobiles is essential to understanding the concepts of Transit Preferential, Pedestrian and Bicycle Street Classification systems.

Rather than have Downtown treated in a separate section, this draft Element reinstates the policies of the Downtown Plan's "Moving About" section into the Transportation Element, eliminating the redundancy, duplication and in some cases, inconsistencies and omissions of the old Transportation Element.

Some of the most important modifications in this updated draft of the Element are in the maps, which are all redrawn. Several maps have been added, as in the Regional, Pedestrian and Goods Movement Sections, and others, such as the old Element's "Rapid Transit Plan", are replaced by maps showing updated, superseding information (in this case, the "Rail Transit Plan".)

Where emphasis is on alternatives to the single-occupancy automobile, ridesharing, walking and bicycles are generally called out.

"Vehicles" and "trips" are often replaced with the more precise "automobiles" (e.g., "single-occupant automobiles," "private automobiles,") to distinguish them from transit and other vehicles.

Significant policy expansions addressing bicycles and pedestrians, including bike access to transit, bike parking facilities, biking and walking as a desirable alternative to the automobile in addition to transit and ridesharing, biking and walking as a desirable means of commuting rather than merely a source of recreation, biking and walking as environmentally sound means of travel, etc.

Certain policies, such as those condemning the Embarcadero Freeway or citing statistics from the 1970's, have been deleted because they are outdated/superseded and they no longer apply.

Many deletions are made solely for the sake of brevity and clarity. For example, many sentences and clauses have been deleted because they are redundant -- restating a concept that was already introduced.

Introduction (Pages I1-I12)

I1-I2	New section "Shaping a Region" helps establish importance of transportation impacts on region rather than just city, and helps set background for following discussion.
I2	More specific examples of impacts added to paragraph headed "Impacts of Automobile Travel in the City."
I3	Deletions shown have been recast in terms of policy in the new Congestion Management Section.
I4-I10	New "History," "Recent Trends" and "Legislative Framework" sections replace text deleted at end of section.
I10-I12	Replaced by new, preceding text on I4-I10.

General (G1-G12)

G1	Last paragraph addition expands citizen participation beyond "residents."
G2	Policy 3 added to promote transit ridership otherwise endangered by flextime concept.
G3-G6	Policy 5 moved from later part of section to this point; new text includes expanded use of bicycles and walking esp. as means of commuting, new provisions for taxis/shuttles and for freight movement.
G6	Deleted paragraph redundantly summarizes new text already inserted in Policy 5.
G7	New Policy 8 supports development of emergency transportation plan.
G7	Deleted Policy 7 replaced by TDM policies in Congestion Management Section.
G8	New text in paragraph beneath Objective 2 represents updated concepts formerly described in Policy 2.
G8	Policies 1 and 2 merged because of similarity.
G9	Deleted Policy 2 superseded by text under Objective 2, p. G8. See above.
G9	Policy 3, first sentence deletion: Embarcadero Freeway text no longer germane.
G10	Policy 4: last sentence calls out conflicts with freight and passenger/ped/bicycle movement.

G10 Policy 5: first paragraph redundant, concept already established.

G11-G12 This text moved and amended as described above (G3-G6).

Regional (R1-R11)
New section (not shown in redline), with many new policies. Objective 1, Policy 1 and Policies 2-4 of Objective 2 are more or less the same as previous policies in other sections, but were restated here and recast in regional terms to support the regional transportation policies. Regional policies on vehicle movement, particularly highways; on transit, inter-regional travel (air, rail, water); on freight movement (esp. the Port); bikes, parking and pedestrian modes all addressed here.

Congestion Management (C1-C8)
The entire section is new (not shown in redline), with substantive new policies. Transit First Policy is here, as is policy encouraging minimal, cost-effective transportation improvements (TSM) and policies encouraging multi-modalism and cooperation from private and public employers to achieve congestion management goals.

Vehicle (V1-V10)
Essentially unchanged, except for elimination of unclear or redundant text, some policy relocation within the Element (e.g., second paragraph under Objective 1), the use of "arterials" to replace "thoroughfares," and more explicit references, when necessary, to vehicles as "automobiles" or "autos." New Policy 4 under Objective 1 is added (p. V5). The "Guide to Vehicle Circulation" on pp. V7-V8 should be consulted for its updated references to specific streets and highways.

Transit (T1-T9)
Also essentially unchanged. The Transit Preferential Streets section (ppT1-T5) has been elaborated upon with its explanation of a distinct and rationally-devised classification system, including a table and the definition of Transit Centers. The original Policies 1 and 5 have been superseded with Policies 1-7, while Policies 2-4, and 6-8 of objective 1 are maintained but relocated to later parts of the section. Under Objective 2, old Policy 1 has been relocated to the Regional section (see above) while the rest are maintained, but they have been updated. For example, old Policy 5's ferry service "between San Francisco and the *north bay*" is rephrased in new Policy 4's as "*...other communities along the bay*," reflecting the post-Loma Prieta expansion of ferry service. Policy 6 on p. T8 in the new Element is lifted out of Policy 6, Obj. 17 of the "Moving About Only" section in the Downtown Plan. Likewise, other objectives and policies, (e.g. Obj. 3, Policy 1) came from the Downtown Plan.

Pedestrian (Pd1-Pd10)

Most of the policies have been pulled from the *Pedestrian* section of the original Transportation Element, the Urban Design Element and the "Moving About" portion of the

Downtown Plan. Newly-revised text under the policy headings are also largely paraphrased versions of the original text. Page-by-page descriptions of the changes follow:

Pd1 The entire introduction is new. The text that has been struck out was never part of the original Element and should be disregarded.

Pd1-2 The only entirely new policies are 3 and 4. Obj. 1 and Pol. 2 are from the Transportation Element, Pols. 1 and 5 are from "Moving About."

Pd2-3 Pol. 6 paraphrased from the Transportation Element; Pol. 7 is new.

Pd3-4 Pols 1-4 are new as policy, but draw their content from the "Fundamental Principles" (both "for City Pattern" and "for Conservation") portions of the Urban Design Element. Obj. 2 and Obj. 3, Pol. 1 are from "Moving About."

Pd4-5 Policies 1-3 are new text, derived largely from "Pedestrian Network Classification of Elements" table in "Moving About," in the Downtown Plan.

Pd9 Obj. 4 is paraphrased from the introductory discussion under "Conservation" in the Urban Design Element. Policies 1 and 2 are from the original Transportation Element, Policies 3 and 4 are new.

Pd9-10 Old Objective 7 and following policies are rearranged and replaced in this section.

Bicycle (B1-B8)
Many new policies have been added to both the original, adopted element and an unofficial, intermediate version of this Element. The Nov. 16, 1994 draft shows strikeouts and deletions **for the interim version** as well as for the original. This distinction was made only to help people such as the Bicycle Advisory Committee who were already familiar with the changes proposed in the Interim Element.. To minimize confusion, the following notes clarify whether the changes described apply to the adopted, Original (marked with and **O**) Element or to the unofficial, Interim (marked **I**) Element. If a described change applies to both, it will be unmarked.

B1 The old Policy 1, "Increase the availability of information for commute cycling," has been paraphrased into Policy 4 on page B4(**O**).

B2 Policy 1 was formerly Policy 2 (slightly rewritten) of the Original Element (**O**).

B2 The deletions in the new Policy 1 represent replacement with more specific and current language ("bikeways" replaced with "bike routes"), eliminate concepts that are not practically applicable to San Francisco (rails-to-trails, contra-flow lanes) or simply reduce unnecessary wordiness (**O**).

B2 Policy 3 relocated from position here to new Policy 3, under Objective 3, on page B8.

B3 Please note that this map is being updated by the Bicycle Advisory Committee.

B4 The phrase "designated bicycle route" in Policy 3 was meant to have been struck out, replaced with "city streets."

B4 As noted above, Policy 4 was formerly Policy 1 (**O**).

B5 Policy 6 is a paraphrase of the old Policy 5 (**O**), which used to read, "Utilize available bicycle funding for projects in San Francisco."

B5 Policy 8 is a new Policy (**O**).

B6 Policy 9 is a new Policy (**O**).

B6 Objective 2, Policy 2 is new and applies the concept in Policy 1 to existing buildings (**O**).

B7 Policies 3 and 4 elaborate on the old Policy 2, which stated "Provide adequate and secure bicycle parking at transit terminals." The new Policy 3 recommends **all** parking be secure, and Policy 4 promotes the parking at transit terminals (**O**).

B7-8 Everything under Objective 3 is new to the original Element (**O**). Policy 1 on page B7 is new to the interim Element (**I**).

B8 As mentioned above, Policy 5 is deleted because it has been paraphrased and superseded by Policy 6 on page B5.

Citywide Parking (Pk1-Pk9)
Most of the significant changes are additions to this section to help bring it in better compliance with the Congestion Management Program (CMP) policies of the state. The transportation policies of the "Moving About" section of the Downtown Plan are also added here when relevant. Examples are the additions of Objectives 2 and 3, and the subordinate policies. Other important additions emphasize the multi-modal nature of transportation, (e.g. the inclusion of provisions for bicycle parking in facilities) the improved accessibility of parking to people with mobility impairments. Deletions are, in general, intended to eliminate redundancy and wordiness.

Pk1 paragraph under Objective 1 deleted because concepts are already established in Introduction.

Pk2 8th bullet text is replaced with text beside 10th bullet.

Pk2 Last bullet text is integral part of state's congestion management policies.

Pk3 Deletions at top of page are all in interest of economizing words.

Pk3 Deleted sentence in mid-paragraph of Policy 4 replaced with and superseded by Policy 7, Objective 2 on page R5, and intercept parking concept in Policy 2 of Objective 5 on page R7, of Regional Section.

Pk4 Subordinate text upgraded to Policy 5 text, with excess words deleted.

Pk4 Policy 6: last sentence addition replaces deletion.

Pk4 Objective 2 and subordinate Policies 1-3 are new. Policies are based on studies that show the parking rate structure can affect the turnover rate and be used to further our policies favoring short-term over long term parking in congested areas. The cash-out policy reflects the recommendations of the state CMP.

Pk5 Objective 3 and Policies 1 and 2 are out of the "Moving About" section of the *Downtown Plan*. Policies 3 and 4 are new, furthering the concept of favoring short-term parking downtown. Policy 5 accommodates motorcycle parking, which was often not explicitly dealt with in the old Element.

Pk6 Objective 4 text is pared down.

Pk6 Policy 1, second paragraph, superseded with language supporting the use of rate structures, permit parking and CMP policies in Policies 1 and 2 of Objective 2 and Policy 4 of Objective 3.

Pk7 Language deleted in interest of eliminating redundancy and being brief.

Pk7 Policy 3 added to tie land use and transportation together as recommended by state CMP.

Pk8 Policy 4 added to promote multi-modalism as recommended by the state CMP.

Pk8 Policy 5 is a new policy to promote efficiency and economy of curb cuts, in the interest of preserving on-street parking and improving the pedestrian environment.

Pk9 Last bullet text emphasizes concept described above for Policy 5, page Pk8.

Pk9 Deletions made to eliminate redundancy and wordiness.

Urban Goods Movement (GM1-GM6)
This is a new section, not shown in redline. Policies 1, 2, 6 and 8 of Objective 5 (pages GM3 and 4) are lifted out of the "Moving About" section of the *Downtown Plan*, paraphrasing Policies 1-4 respectively of that section's Objective 21.

n:\transele\transpor.doc

SAN FRANCISCO PUBLIC LIBRARY
3 1223 04589 4152

TRANSPORTATION ELEMENT

INTRODUCTION

(Revised text)

The Plan for Transportation is composed of several sections, each of which deals with an important component of the local and regional transportation system. The plan sections are (1) ~~Mass Transit,~~ General, (2) Regional Transportation, ~~(2) Vehicle Circulation,~~ (3) Congestion Management, ~~(3) Pedestrian Circulation,~~ (4) Vehicle Circulation, (5) Transit ~~Bicycles,~~ (6) ~~and Citywide Parking~~ Pedestrians, (7) Bicycles, (8) Citywide Parking and (9) Goods Movement. ~~(The Downtown Plan contains a section on Downtown Transportation.)~~ Each consists of objectives and policies regarding a particular segment of the master transportation system and related maps which describe key physical aspects. Since these ~~modal plans are~~ various ~~alternative~~ travel systems ~~which~~ often parallel each other, they must be read together to understand their functions ~~assigned to each~~ and ~~their~~ characteristics. Each must also be understood in relation to the other elements of the Master Plan of the city.

~~An overall framework for the separate plan components is provided by the statement of General Objectives and Policies for Transportation, which introduces the Plan . The two~~ Within each of the nine plan sections are general objectives, which ~~are intended to~~ express desirable goals, and policies that prescribe steps toward achieving these goals. They may not always be ~~in harmony~~ entirely compatible. For instance, it may not be possible to satisfy all travel needs in the most convenient manner and at the same time maintain a transportation system which preserves and promotes a desirable living and working environment, supports development in the right locations, and is financially feasible for the City to implement ~~reasonable~~. Each specific ~~proposal or~~ policy in the separate plans sections might well be seen as a compromise among these overall objectives and policies, based on weighing the advantages, disadvantages and costs of various alternatives.

In establishing the Objectives and Policies, certain **Fundamental Assumptions** of the nature of transportation are made. In addition, this Element examines and considers the **History** of transportation in San Francisco, **Recent Transportation Patterns and Trends**, and the **Changing Legislative Framework** of government at local, regional, statewide and national levels that influences current and future developments in transportation.

FUNDAMENTAL ASSUMPTIONS

Shaping a Region

The provision of transportation services is a complicated and vital function in urban society. The very shape of the central city and outlying communities is formed by the forces of transportation. Clearly, one of the most difficult challenges for any metropolitan area is to accommodate the transportation needs of its population while maintaining and enhancing the city and region as a desirable place to live and work. On the other hand, some of the most fundamental problems contributing to the deterioration of the quality of life in an urban area -- air pollution, traffic congestion, suburban sprawl, visual blight, depletion of natural resources --

are caused by the inadequate and inefficient provision of transportation services, particularly in relation to the use of adjacent land.

The setting of the San Francisco Bay Area -- the bay, the ocean, the mountains, the three large city centers and the other communities along the bay and the inland valleys -- is a fundamental part of its celebrated quality of life. These same characteristics make the challenge of improving the transportation network particularly complex. The water and hills are obstacles for conventional transportation systems, albeit beautiful ones. The flow of the region's automobile traffic is immune to the political boundaries between San Francisco, Oakland and San Jose, and increasingly, has neither origin nor destination in these three cities. As open, developable land grows scarce and the central area of the region matures, the impacts of accommodating the movement of people and goods throughout the Bay Area become more significant, particularly in the areas adjacent to transportation infrastructure, and the welfare of a community -- or a neighborhood within a community -- may be pitted against the good of the entire region.

The high costs of investments in any component of a transportation system -- transit, highways, sidewalks, freight movement -- underscore the need for comprehensive planning. The interrelationships of different components must be studied, the surrounding land use must support the investment, and the needs of the locality and the entire region must be considered. If the Bay Area's future transportation system is to be successful, it must be managed and developed with creativity, responsiveness to current and future trends, sensitivity to the land use and environment it serves, and cooperation and coordination on both a local and regional scale.

Impacts of Automobile Travel in the City

The impact of automobile traffic on the San Francisco environment is an undeniable problem. Increasing traffic ~~portends~~ causes more environmental damage in addition to greater difficulty and inconvenience in traveling ~~by car~~ within the city. Efforts to accommodate the automobile in the city -- using land and resources for off-street parking, constructing freeways, designating streets for greater traffic volumes -- threaten the attractive appearance and economic viability of the city's neighborhoods. A basic assumption of the Transportation Element is that a desirable living environment and a prosperous business environment cannot be maintained if traffic levels continue to increase~~ without limits~~. Various methods must be used to control and reshape the impact of automobiles on the city~~ and to use other means of transportation to improve the environment~~, including improving and promoting public transit, ridesharing, bicycling and walking as alternatives to the single-occupant automobile; limiting the city's parking capacity, especially long-term parking in commercial areas; directing major traffic movements to certain routes; limiting the vehicular capacity of the city's streets and highways; and accepting a certain level of congestion in the city as inevitable.

~~Benefits of Control~~ Reliance on Alternatives to Automobile Travel

~~The benefits of controlling automobile travel in the city are significant.~~ A balanced, multi-modal transportation system, including public transit, ridesharing, automobiles, bicycles and pedestrians, is necessary not only for a high quality of life, but also to maintain the economic well-being of the community. Clean air, minimal traffic congestion, a wide array of transportation alternatives and a ~~safe,~~ human-scaled, pedestrian-oriented ~~commercial and retail~~ urban environment attract both residents and businesses. On the other hand, the costs of pollution, congestion, and ~~unpleasant, unsafe commercial areas~~ automobile-oriented development of a scale that is unpleasant and inconvenient for pedestrians are not only

~~measured~~reflected in urban flight and loss of business, but also in the penalties that may be assessed by local governmental agencies such as the Air Quality District when ~~the blighted~~ these conditions are not brought into compliance with established standards.

In this respect, San Francisco's traditional reliance on public transportation for both work and non-work trips has paid off. San Francisco has a considerable and comprehensive variety of transportation alternatives, comparatively little air pollution, and commercial and residential districts well-known for their agreeable, walkable~~, human-scaled, pedestrian-oriented~~ character. A fundamental assumption of this Element is that the future of the high quality of life and strong market appeal of doing business in San Francisco depends on the success of maintaining and enhancing its balanced, multi-modal transportation system.

~~One method for controlling automobiles is to limit the capacity of streets and highways, especially those entering the city. Some such limits will be necessary to prevent commuter travel from changing the character of many parts of the city and overburdening local streets.~~

~~A second method is to improve transit service in order to make it at least as efficient and comfortable as the private auto, both for commuters and for residents with many kinds of trip purposes. While some people ride transit because they have no alternative, others will ride only if transit is the better way to travel. Within San Francisco, fortunately, the Municipal Railway has maintained a higher level of service than most cities. The approach can be made even more positive by selling transit with continuously better service to attract more riders. It is an assumption of this Element that the convenience and comfort of transit service will have to be increased sufficiently to attract a larger proportion of total travel within the city.~~

~~Another method for controlling the total level of automobile traffic, but the least desirable one, is that of accepting congestion in certain circumstances. Congestion signals to travelers that the system is overloaded and that the particular route or time for travel is not an efficient one. At the same time congestion is an implicit control on traffic volumes because it restricts the number of vehicles which can move through a limited space. No one likes congestion; it involves loss of time, inconvenience and frustration. It may also increase pollution and encourage drivers to use residential streets. On the other hand, when a great many people desire to travel at the same time to the same place, it is unavoidable. (This is also true for transit.) Those who can do so should travel at a different time or to a different place. It is assumed that congestion can never be totally eliminated: the costs, both monetary and environmental, of providing for potential peak traffic flows would be too high. In addition, in some circumstances congestion must be used to restrict total traffic volumes, particularly during interim periods when transit is being improved or where the cost of providing convenient automobile travel is unacceptable.~~

~~Another method of restricting the impact of automobile traffic is to confine major movements to certain routes. It is a principle of the Element to do this, while providing for convenient automobile movements where they are necessary or desirable.~~

~~A fifth, and perhaps the most effective strategy to limit automobile traffic, is to limit parking capacity, especially for long term parking in employment centers. This method includes congestion pricing mechanisms during times of higher demand, while encouraging parking turnover and the use of off-street lots and garages in neighborhood commercial districts.~~

HISTORY OF TRANSPORTATION IN SAN FRANCISCO

Pre-1906

The development of early San Francisco was strongly influenced by geography. Constrained by the bay, ocean and hills, the city had a limited capacity for expansion. It grew from the northeast waterfront west toward the Presidio and south to Mission Dolores. Public omnibus service was introduced in 1852, followed by horse-drawn cars. The cable car was invented in 1873 to climb the downtown hills, and the first streetcar began operation in 1890. An efficient system of ferries connected San Francisco to Oakland and the continental railway across the bay. Due in part to the city's small size, the geographic constraints, and to the rapid increase in population in the last decades of the nineteenth century , San Francisco became "built out" very quickly in comparison with most other cities on the West Coast.

1906-1960

In the period of downtown reconstruction after the 1906 earthquake, the outer areas of San Francisco developed rapidly. The construction of the Stockton Street, Twin Peaks and Sunset streetcar tunnels between 1914 and 1927 opened areas for development that had been constrained by topography. Regional transportation connections to San Francisco were improved as the Southern Pacific Railroad Bayshore bypass (1908) skirted San Bruno Mountain for quicker access to the Peninsula, and the San Francisco-Oakland Bay Bridge (1936) and the Golden Gate Bridge (1937) linked the city to the East and North Bay. The Bay Bridge accommodated auto traffic as well as the Key System interurban trains that ran on the lower level of the bridge between San Francisco's Transbay Terminal and the East Bay, but the opening of these bridges ultimately encouraged the use of the automobile. The automobile's new popularity led to the demise of the ferry operations and later, the Key trains themselves.

The automobile soon became the dominant means of transportation in San Francisco and the Bay Area. The construction of the Bayshore and other highways, the bridges and tunnels brought a much wider range of communities throughout the Bay Area within commuting distance to San Francisco. The automobile also facilitated the development of outlying portions of the city that were not accessible to, or well-served by, the existing public transit network, such as Twin Peaks and Diamond Heights. However, most of the city's streets had been designed for street and cable car railways, not the automobile. Burdening the street system resulted in parking shortages and growing congestion.

The popularity of the automobile also contributed to the decentralization of the Bay Area. San Francisco's 1948 Trafficways Plan proposed an elaborate network of eight freeways crossing San Francisco and a second bridge parallel to the Bay Bridge to close the gaps in the regional highway system and to respond to growing traffic congestion, which was most severe in the inner cities. Many of the traditional city centers in the Bay Area, such as Oakland and San Jose, experienced severe decentralization as regional shopping centers and new office and industrial parks were developed in suburban communities, and San Francisco's pre-eminence as the region's employment and retail center diminished significantly. The automobile was better able than transit to adapt to these trends and soon became the primary means of commuting in the region. This in turn spurred more decentralization and the decline of public transit ridership.

The Freeway Revolt and "Transit First" (1960-1989)

3 1223 04589 4152

S F. PUBLIC LIBRARY

City residents and politicians protested the proposed 1948 Trafficways Plan, fearing that it would destroy the city's livability and character. This response, known as the "Freeway Revolt", led to the deletion of the Western, Park Presidio and Crosstown freeways and, in 1959, the suspension in mid-construction of both the Embarcadero and Central Freeways. The ugliness and intrusiveness of these freeways, and the increased automobile traffic they attracted, encouraged the Board of Supervisors to further reject new alternatives in 1966 for cross-town freeway connections, permitting only the construction of the Southern Freeway (I-280).

Instead of relying on freeways to met its transportation needs, the city sought to place greater emphasis on mass transportation. In 1973, the San Francisco City Planning Commission and Board of Supervisors adopted the "Transit First Policy", giving top priority to public transit investments as the centerpiece of the city's transportation policy and adopting street capacity and parking policies to discourage increases in automobile traffic.

Regional and local mass transit diversified and expanded during the 1970's and 1980's. Proposed in 1957, the Bay Area Rapid Transit System (BART) began East Bay and West Bay service in 1972-3, and transbay service in 1974. Commuter ferry service was reinstated between Marin County and San Francisco in 1970. The Golden Gate Bridge Highway and Transit District and SamTrans took over and expanded the Greyhound commuter bus operations in the North Bay (1972) and on the Peninsula (1974), respectively. In 1980, the California Department of Transportation took over the Southern Pacific commuter rail service on the Peninsula (and renamed it Caltrain), and in 1992 the operation of Caltrain was assumed by a Joint Powers Board representing San Francisco, San Mateo and Santa Clara Counties. The San Francisco Municipal Railway (Muni) upgraded its surface streetcar operation to a surface and subway light-rail network in 1979. By the time of the 1989 Loma Prieta Earthquake, public transportation in San Francisco was a diverse, though not seamlessly coordinated, system of regional and local bus service, electric trolley buses, ferries, commuter trains, heavy and light rail transit, and cable cars. After decades of poor coordination and large service gaps between different transit systems, great strides were made in linking and facilitating transfers between local and regional transit services. Muni and BART introduced the "Fast Pass" allowing unlimited trips and free transfers between the two systems for trips made in San Francisco during one month. Plans were drawn for the Muni Metro extension to Mission Bay, connecting Caltrain to Muni Metro and BART, for the F-line connection between BART/Muni Metro, Upper Market, the Northern Waterfront, the Transbay Terminal and the Ferry Building, and for a Caltrain extension into downtown.

Nevertheless, decentralization of the Bay Area continued, making it difficult for mass transit to meet the needs of residents and commuters traveling to the outlying, suburban parts of the region. Manufacturing continued to diminish in importance as a sector of San Francisco's economy, which was becoming more dominated by such office sectors as finance, administration and service. Much of the growth in the industrial and manufacturing sectors of the Bay Area's economy occurred in the East and South Bay. The Port of Oakland, already at an advantage because of its proximity to multiple railheads and servers, assumed a greater share of the Bay Area's waterfront traffic after it had adapted to cargo containerization, and the Port of San Francisco's Belt Line Railroad became obsolete and was eventually dismantled.

REF 388.4097 T6875d

Post-1990

Transportation element
of the comprehensive
[1994]

Due to the damage from the 1989 earthquake, the Embarcadero Freeway, the Terminal Separator Structure, and portions of the Central Freeway were razed. The city has taken the official positions not to replace these structures, deferring to both the legacy of the Freeway Revolt and the "Transit First" policy. Twenty years after the policy was adopted, its implementation appears to be a success: nearly all of the substantial growth in commuter travel to and from the Financial District since 1970 has been accommodated on transit. The aftermath of the earthquake, particularly the temporary closure of the Bay Bridge, renewed a reliance on public transportation. New ferry service to the East Bay and expanded BART and Caltrain service continue to attract riders well after the bridge was reopened.

The benefits of San Francisco's investment in alternatives to the single-occupant vehicle extend beyond its relatively clean air and stabilized traffic congestion. The high transit modal split fostered over the twenty years by official city policy positioned San Francisco, unique among California cities in 1993, in compliance with the requirement of the State Clean Air Act to initiate a Trip Reduction Ordinance, thereby exempting many of the city's employers from burdensome regional regulations.

RECENT TRANSPORTATION PATTERNS AND TRENDS

~~Commuter Travel to the City~~

The number and proportion of city residents commuting on public transit declined steadily between World War II and 1970, but this trend was reversed in the next decade. The 1980 census showed more employed residents using a better balanced transportation system than in 1970: more transit ridership and greater use of alternatives to the private automobile for commuting, such as carpools and bicycles. Transit ridership grew in proportion (3.3%) as well as in number (17,500 additional riders), while the proportion of people who drove or used carpools fell from 49% to 46%. Of the nearly 550,000 workers in San Francisco (downtown and citywide) identified in the 1993 Citywide Travel Behavior Study, 47% took transit, 31% drove alone, 15% used car or van pools, 5% walked and 2% rode bikes or motorcycles.

Of the downtown workers, commuters from Alameda and Contra Costa County are more likely to ride public transit than residents of any other county. San Franciscans are next, followed by workers from Marin, Sonoma and Santa Clara County. San Mateo County residents, who number more among downtown San Francisco workers than residents from any other county except San Francisco and Alameda, are less likely to commute to downtown San Francisco by public transit. This suggests that the relative isolation of San Francisco, which is surrounded on three sides by water, encourages transit usage where freeway access is limited and funneled through toll bridges (the Golden Gate Bridge from Marin County, the Bay Bridge from Alameda and Contra Costa Counties) and where there is abundant transit capacity and service (from all parts of San Francisco, and even more impressively, from Alameda and Contra Costa Counties, which are served by both BART and AC Transit).

Conversely, two freeways provide highway access from San Francisco to the Peninsula, and they are supplemented by a number of surface arterials such as Bayshore and Alemany Boulevards that carry a considerable amount of peak-hour commuter traffic. Transit capacity and service on the Peninsula between San Mateo County and San Francisco is much more limited: Caltrain runs hourly at off-peak times and does not bring commuters directly downtown, while the only SamTrans lines that approach the frequency of BART service are the shuttles that connect to the Daly City BART station.

While rush-hour traffic is commonly recognized as the most problematic transportation problem in the city, *Home-based Work Trips* -- trips that are made between the home and place of employment -- account for only one quarter to a third of all daily trips. The majority of daily trips are *Non-Work Trips*, those made for shopping, school, recreation, and multiple purposes, such as shopping or picking up children from day care on the way home from work, or going out to dinner from the workplace. These trips demand much more flexibility, convenience and complexity than a transportation system designed for simple home-to-work travel. Consequently, automobiles figure more importantly in making non-work trips than in making home-based work trips.

Nevertheless, the 1993 Citywide Travel Behavior Study shows that in downtown, almost twice as many non-work trips made from the workplace, such as shopping, dining out, or attending the symphony or a museum, are made on foot (47%) than by any other mode. Trips by automobiles account for 26%, and a sizable portion (16%) are made on transit. This suggests that once people have arrived downtown, they are far more likely to walk, and in some cases, ride transit to non-work destinations than they are to drive. The Survey also shows that walking is an important mode for "neighborhood trips" -- San Francisco residents traveling in their own part of town. Walking accounted for over one quarter of all non-work neighborhood trips in the Southwest part of town, and almost two-thirds in the Northeast part of town. Walking and transit combined are the modes of travel for 36% of these neighborhood in the Southwest, 37% in the Southeast, 44% in the Northwest and 80% in the Northeast.

Between 1980 and 1990, the gains in transit ridership were slightly offset by other trends, most notably the reverse commute. The proportion of Bay Area workers commuting to the work in suburban communities instead of the central cities grew dramatically between 1970-1990. Since the suburbs are relatively inaccessibility by public transit, this trend may have contributed to the decline in the number (1.2%) and proportion (5%) of city residents commuting by transit. Accordingly, an increasing proportion of employed San Francisco residents drove alone, took carpools, or, significantly, worked at home (a 92% increase over 1980). However, the presence of a high-frequency, high-capacity transit system like BART appears to induce even reverse commuters to take transit. From a list of the top fifteen districts ranked by the proportion of workers using public transit out of 34 Bay Area districts, ten were in cities and suburbs that are served by BART.

CHANGING LEGISLATIVE FRAMEWORK

The 1990 Americans with Disabilities Act, which mandates that all new transit vehicles of fixed-route systems be accessible to all patrons, has had significant financial impact on local public transportation. However, many of the federal programs created in the 1960's and 1970's to support transit and encourage alternatives to the automobile were reduced or dismantled in the 1980's. Transit operators were strained to maintain and improve transit service, and local jurisdictions were burdened with the responsibility to fund them. Since 1978's Proposition 13 limited the ability of local jurisdictions in California to raise their own funds, Bay Area cities and counties were challenged to find other sources of funding.

At the same time, metropolitan areas across the country recognized the importance of emphasizing alternatives to the automobile and balancing transportation systems as traffic congestion and air pollution became severe. As a result, the 1980's saw important restructuring in the objectives and methods of transportation planning, at all levels of

government, often mirroring and drawing upon the transportation policies and ideals San Francisco had been advancing for decades. Some examples of the most significant changes in the legislative framework are provided below:

TRANSPORTATION DEMAND MANAGEMENT

Over the last two decades, San Francisco has adopted and implemented a variety of policies, programs, and ordinances that have been successful in accommodating increased commute travel demand without significantly increased highway and road capacity. These Transportation Demand Management (TDM) measures (such as the City's "Transit First Policy", provisions in the Planning Code, and other City ordinances) form an integrated strategy to provide viable alternatives to the use of the single-occupancy vehicle. Efforts to increase the use of public transportation and ride-sharing have been concentrated on downtown. Since 1979, all newly constructed buildings with over 100,000 square feet of office space downtown are required to take part in the City's TDM programs. In addition, large institutions and developments in Mission Bay and South-of-Market are required to establish and maintain a transportation management program.

AIR QUALITY

In 1979, the *Bay Area Air Quality Plan* developed the first regional transportation control measures, and revised them in 1982. The *1991 Clean Air Plan*, prepared in response to the *California Clean Air Act* of 1988, contains 23 transportation control measures. The Federal *Clean Air Act Amendment of 1990* passed in November 1990 specifies further air quality planning requirements. The *California Clean Air Act* of 1988, however, is more stringent than existing federal regulations, requiring considerable efforts in significantly reducing stationary and mobile-source emissions of pollutants, including:

- No net increase in vehicle emissions beyond 1997.
- An average 0.4 private vehicles/employee goal to be achieved by 1999 for employers in the downtown area, and 0.67 vehicles/employee for the rest of San Francisco.

Regional and local transportation plans, such as elements of the Master Plan, are required to incorporate policies that are consistent with the *Clean Air Plan.*

CONGESTION MANAGEMENT PROGRAM AND TRIP REDUCTION ORDINANCE

Responding to years of declining mobility, especially in metropolitan areas, the state legislature (AB 471) established the Congestion Management Program (CMP). The CMP requirements, which include the development of a Trip Reduction Ordinance for each jurisdiction, became effective in June 1990 through voter approval of Proposition 111. The intent of the CMP is to improve land use and transportation coordination, state and regional air quality standards, and to tie transportation funding decisions to measurable congestion relief. The CMPs are prepared by the Counties and are to be updated annually. The City's CMP and Transportation Element are mutually reinforcing planning efforts.

The San Francisco Transportation Authority has determined that the policies and provisions of the Master Plan and Municipal Code together constitute the effective equivalent of a Trip Reduction Ordinance required under the CMP, and that there is no need for separate legislation.

REAUTHORIZATION OF THE FEDERAL SURFACE TRANSPORTATION ACT

In late 1991, Congress passed and the President signed the Intermodal Surface Transportation Efficiency Act (ISTEA), which reauthorizes the federal-aid highway and transit programs through 1997. Of particular relevance for local transportation planning are the following elements, compared to previous federal policies:

- increased state and local authority in transportation planning decisions,
- regional and local flexibility in how transportation funds are allocated,
- increased emphasis on urban transportation, and
- a doubling of funding for public transportation.

Additionally, restrictions have been put on those highway capacity expansions that would provide benefits primarily to single-occupancy vehicles. ISTEA funding is available for programs that would bring air quality non-attainment areas into compliance with the *Clean Air Act*, and for traffic monitoring, management, and control programs and facilities.

METROPOLITAN TRANSPORTATION SYSTEM

The Metropolitan Transportation System (MTS) is the major, new implementation tool of the Metropolitan Transportation Commission's *Regional Transportation Plan*. The purpose of the MTS is to balance regional mobility with environmental, equity, and economic objectives. The MTS was designed to

- function as a multimodal, integrated system addressing both passenger and freight mobility,
- focus on inter-regional and intra-regional trips between major activity centers,
- provide regional and local funding flexibility within overall mobility objectives.

The MTS consists of an integrated system of streets and highways, transit facilities and important transfer point. Those arterials and highways that are part of the MTS network are considered to have a potential relief function for adjacent freeways by serving longer local trips that might otherwise be accommodated on freeways. In more general terms, an arterial or a highway qualifies as part of the MTS if it

- serves a major Bay Area activity center (when within .25 to 1 mile of such a center),
- provides important intercounty and/or inter-regional connections,
- serves as a reliever for a freeway,
- provides important connections in the MTS street and highway system,
- serves as a major crosstown arterial for significant intra-city travel,
- provides major access to airports and seaports,
- provides access to regional transit transfer facilities, and

- serves as an important goods movement route.

The MTS is designed to focus MTC's transportation planning decisions and to provide flexibility in regional funding decisions under the new Intermodal Surface Transportation Efficiency Act (ISTEA).

REGIONAL TRANSPORTATION PLAN

One of the key statutory duties of Metropolitan Transportation Commission (MTC) is to prepare a Regional Transportation Plan for the nine-county Bay Area. This Plan incorporates the policy recommendations and recommended actions by MTC for transportation projects in each county, and is generally updated on an annual basis. Recent legislation, such as the California Clean Air Act, the Americans with Disabilities Act, local sales tax expenditure plans, the state Congestion Management Plan and the Federal ISTEA, has had significant influence on the structure and function of the Regional Transportation Plan. The Plan now must include only projects that can be delivered with funds expected to be available over a 20-year time frame. MTC uses the Regional Transportation Plan for all nine of the Bay Area Counties to guide allocations of local and federal money to projects that are consistent with the legislation and the priorities of each jurisdiction. Certain MTC plans, such as the Rail Starts and Regional Ferry Plans, were developed to identify and prioritize projects related to specific transportation modes. The 1993 Regional Transportation Plan has since introduced two funding "tracks" to classify projects: Track 1, those projects that can be financed with available local, regional and state funds; and Track 2, an advocacy document outlining the need for funding high-priority transportation projects not included in Track 1.

The recent, fundamental changes in the objectives and means of planning transportation at all levels of government provide an unprecedented opportunity for the City of San Francisco and the Bay Area. This Transportation Element establishes the following objectives and policies in recognition of this opportunity and the importance of managing transportation in the preservation and enhancement of the Bay Area's high quality of life.

~~While the resident labor force is increasing, and expectations are for an increase in the ratio of workers per household, San Francisco's continuing growth in employment is anticipated to result in a continuing growth in commuter travel to the city.~~

~~Any increase will require expanded transportation, since existing facilities are strained to capacity during the rush hours. The need to provide greatly expanded facilities poses both environmental and financial problems: growth, like everything else, has its costs. This is true, not merely in the case of transportation, but also for a variety of municipal services.~~

~~It may be that the city can support only a certain level of employment of nonresidents without unacceptable costs, just as available services and facilities can support only a certain residential population if environmental standards are to be maintained. Transportation planning can be used to guide, shape and control growth itself and should therefore relate to the issue of growth. However, the exact effects of growth in terms of costs and benefits and what should be done to prevent undesirable results are not clearly understood at this time. What is a desirable level of employment is difficult to assess; little is known about the~~

~~consequences either of allowing unlimited expansion or of attempting to limit growth. For this reason a consensus on this issue is difficult to achieve. The Transportation Element will require changes as knowledge of these factors improves and as public agreement on values is more clearly defined.~~

~~The assumption of this Element is that, until an optimum employment level is determined, the city should assess each new transportation project on the basis of the ability of the transportation system to accommodate additional commuter travel and the impact on the quality of San Francisco's environment. To this end the Element assumes that all additions to the commuter load as a result of job growth in the city should be accommodated by public transit. Consequently the Element does not recommend new facilities which would increase the number of cars entering the city. Automobiles cannot be the primary means of commuter travel. Even without further growth in demand, increased transit use is required to alleviate the congestion and undesirable side effects of commuter travel through the city's neighborhoods.~~

~~Resident Travel Demand~~

~~Information on current citywide resident travel needs and desires is incomplete, although the Department of Public Works has collected substantial data on specific types of travel. Assumptions as to future demands can, however, be generalized. The chief trend will be an increase in the number of trips by individuals for shopping, recreation, entertainment and other travel not related to employment. Rising incomes and increased leisure time will be the basis for growth in non-work travel, as in the past. Most of these this occur during the non-peak hours with destinations outside downtown and even outside the city, both on weekdays and on weekends. Weekend recreational travel, especially, will continue to grow rapidly.~~
~~At present from 70 percent to 90 percent of this non-work travel is by automobile. If this pattern continues, as is likely for some time, automobile traffic during the non-peak hours and on weekends will increase faster than during peak hours. Although streets built to peak hour capacities link downtown with districts in the city, the same kind of capacity often does not exist for inter-district traffic. As a result, congestion and lengthy travel times may become more serious for crosstown travel than for travel to downtown. It is doubtful that the use of automobiles to satisfy most or all of this travel demand can be accommodated without unacceptable environmental costs and losses in housing and business space necessitated by street widenings or freeway construction. public transit must be expanded to accommodate this travel need, in addition to the peak-hour commuter function.~~

~~Financing and Technology~~

~~No radical change in transportation technology is expected, although improvements taking advantage of existing industrial techniques, as in BART, or of the developing "smart cars and highway systems" will occur. The basic requirements of transportation systems, in terms of network organization, space consumption, power sources, and speed, probably will not change. It is still reasonable to plan for systems requiring normal rights of way, a choice between private or shared vehicles, electric or gasoline power, and normal terminal and collection distribution requirements.~~
~~In the case of finance, federal and state expenditures have weighted transportation decisions at all levels of government too heavily in favor of automobile transportation. The resulting imbalance must now be corrected.~~

~~Even with further assistance from federal and state government, San Francisco will have to finance a large portion of transit improvements itself. In some cases new facilities will be~~

~~made very expensive by the necessity of below-grade construction to protect the environment. It will be essential to conserve resources by making the best possible use of existing facilities, making the street system serve more functions, making the fullest use of the existing inventory of transit vehicles, and encouraging private enterprise to supplement government action, in the areas of freight delivery systems, ride-sharing, flexible work hours, supplementary transit, public transit financing, pedestrian movement, and parking. It will also be important to assure that nonresidents coming to the city pay their fair share of the costs of facilities provided by the city.~~

~~THE ROLE OF GOVERNMENT~~

~~All levels of government have long been involved in transportation planning and development, but, this is especially the case at the local level. The city builds and maintains the streets, operates the transit system, builds parking facilities and runs the port and airport. The reason for government involvement and control is that in a fundamental sense all transportation is public: common facilities must be provided.~~

~~A division of transportation responsibilities among governments by level and area is possible, but it is beginning to seem less useful to allocate transportation functions by mode or facility among separate agencies within one level of government. In the Bay Area and in San Francisco there are a multiplicity of agencies responsible for various aspects of transportation operations. In the city, responsibilities are shared by the Public Utilities Commission, the Department of Public Works, the Police Department, the Airports Commission, the Port Commission, the Parking Authority and the Department of City Planning. Each of these agencies not only has some part of the transportation function but also has many other responsibilities. More coordination is required; reorganization and consolidation of transportation functions would be desirable as a part of a general restructuring and streamlining of city government. Coordination of transportation planning with land use planning and development is especially important.~~

GENERAL
(revised text)

OBJECTIVE 1

MEET THE NEEDS OF ALL RESIDENTS AND VISITORS FOR SAFE, CONVENIENT AND INEXPENSIVE TRAVEL WITHIN SAN FRANCISCO AND BETWEEN THE CITY AND OTHER PARTS OF THE REGION WHILE MAINTAINING THE HIGH QUALITY LIVING ENVIRONMENT OF THE BAY AREA.

The city's first responsibility in the planning and operation of its transportation system is to provide the mobility necessary to its residents in pursuing a wide range of opportunities for work, education, recreation and contact with others. The city must also provide for the many persons who come to San Francisco for work and pleasure and who contribute to the life of San Francisco.

Residents and visitors present a formidable array of demands for transportation services and facilities. Since all transportation facilities must by their nature be shared, at least in part, the transportation system can meet ~~each~~ individual~~s~~ and special needs only to a limited extent. A balance must be struck between the ultimate goal of providing convenient travel for all people to their desired destinations and the monetary and environmental costs~~, both monetary and environmental,~~ that such a transportation system might ~~require~~ incur.

POLICY 1

Involve citizens in planning and developing transportation facilities and services, and in further defining objectives and policies as they relate to district plans and specific projects.

Citizen involvement in all planning is essential. At least three different levels of citizen participation can be recognized in transportation planning. First, citywide participation is required for decisions on citywide problems, policies, and facilities. Almost all major improvements have citywide implications and should be subject to citywide, perhaps regional, discussion and debate. Members of community groups as well as advocacy groups representing relevant issues and viewpoints should be included. Second, most citywide facilities have some special impact on a particular part of the city, and therefore affect ~~on~~ the residents and businesses in that area. Residents should participate actively in the specific design of these facilities, even though some of the basic decisions have been made on a citywide basis. Third, some improvements and changes have only very localized impacts and, in such cases, the owners and residents of the affected properties ~~area~~ should be ~~more~~ directly involved in planning decisions.

POLICY 2

Give priority to public transit and other alternatives to the private automobile as the means of meeting San Francisco's transportation needs, particularly those of commuters.

In order to maintain a desirable living and business environment in San Francisco, the use of mass transit, ridesharing, walking and bicycling must assume a high priority to ensure mobility for commuters and residents alike. Mobility is ideally provided by a well-connected, multimodal system, but where a choice must be made to either provide public transit or accommodate the private automobile, public transit should receive the priority, consistent with the city's Transit First policy.

~~Improvements or additions to the city's transportation system should involve investment in permanent mass transit facilities and equipment, and street improvements designed to facilitate transit movements. Street improvements designed to facilitate automobile movement should be limited to those that at minimum expense can ensure safe automobile travel.~~

POLICY 3

Increase the capacity of transit during the off-peak hours.

The capacity of the city's transportation system can be used more efficiently by spreading work trip arrival and departure times over a longer period. This could be achieved by such administrative devices as staggering work hours, encouraging shoppers and visitors not to travel during peak hours, altering school hours, and implementing differential bridge tolls. For the streets and highway system, this could mean less congestion, less automobile emissions and a diminished necessity for high capacity freeways. However, the frequency of service and the capacity of the city and regional transit systems must be increased in these off-peak hours if transit is expected to be a primary means of travel in and around San Francisco.

POLICY ~~43~~

Coordinate regional and local transportation systems and provide for interline transit transfers.

Transportation facilities are interdependent, and efforts should be made to ensure an efficient system by coordination of local and regional efforts. The regional and local transit systems must be closely linked to provide for transfers. Similarly, regional highways and freeways must be integrated with the local street system. Costly

mistakes and service redundancies can be avoided by advance planning and agreement among the many agencies involved in transportation planning affecting San Francisco and the Bay Area.

All transit operators should provide free transfers between routes for travel within the city, although fare increments are justified for travel outside the city~~ by BART, ferry or bus~~. A transfer arrangement should be made among BART, AC Transit, the ferries and Muni and other systems to allow for ~~transfers from regional to city systems~~ trips outside the region at a reasonable incremental cost. To further enhance coordination, bicycles should be accommodated on all regional public transportation systems.

POLICY 54

Ensure choices among modes of travel and accommodate ~~give priority to~~ each mode when and where it is most appropriate.

San Francisco and the Bay Area have various means of travel: automobile, bus, streetcar, taxi, cable car, ferry, railroad and BART. Walking and bicycling are used by many people. Flying is occasionally used as a means of intra-regional travel. Each mode of travel has special advantages or disadvantages for certain types of trips and for certain origins and destinations. The least costly or most convenient means to satisfy travel demand is not necessarily the best investment in the context of comprehensive planning: cost or convenience must usually be balanced against effects on the environment and impact on land use and development patterns.

The following conditions listed under each mode choice are not mutually exclusive, and may apply to more than one travel mode, especially when the modes are compatible with each other:

Mass transit should be given priority for the following kinds of trips and/or in the described areas:

- For work trips generally within and to San Francisco, and to other densely developed parts of the region, especially to all major employment centers.
- For intercity trips between core areas of major cities and for travel to core areas in general.
- For trips occurring generally during periods of high travel demands.
- Where demand for travel between any two or more relatively compact or densely developed areas is high.

- In areas and around institutions where large numbers of people with limited means or low automobile ownership reside or arrive at a destination.

- Where travel demand exceeds the capacity of an area to absorb more vehicular traffic without substantial environmental damage or where further capacity for automobile movement or storage is very costly.

- Where required or useful to stimulate development.

- For trips to major recreation areas and to sports, cultural and other heavily attended events.

- For trips to neighborhood commercial districts, especially those that do not contain many automobile-oriented uses.

Automobiles should be accommodated for making the following kinds of trips and/or in the described areas:

- For trips occurring where transit is not well-suited for the purpose, such as shopping for oversized or bulk items.

- For intra-regional trips outside the major cities and for intercity trips between non-core areas of the major cities.

- Where business travel requires the use of an automobile for short-term and intermittent trips.

- On streets having the capacity to absorb additional vehicular traffic as an alternative to freeway construction without substantial environmental damage or conflict with land uses.

Walking and bicycling should be given priority for the following kinds of trips and/or in the specified areas:

- In parks, on trails and in other recreational areas, and where the enjoyment of slow movement and the preservation of the natural environment would be severely compromised by automobile traffic.

- For work trips generally within San Francisco, especially the downtown area.

- Where concentration of activity is high, particularly where streets are narrow and the intervening distances are short, that more convenient access among interrelated activities may be achieved by walking, bicycling or limited distance people-movers than by other modes.

- In areas and around institutions where large numbers of people with limited means or low automobile ownership reside or arrive as a destination.

- Where travel demand exceeds the capacity of an area to absorb more vehicular traffic without substantial environmental damage or where further capacity for automobile movement or storage is very costly.

- In neighborhood commercial districts, and where cultural and recreational facilities are clustered.

- Surrounding transit centers and along transit preferential streets, where the facilitation of pedestrian traffic is necessary to successful and safe transit operation.

Taxis, water taxis, paratransit services and shuttles should be accommodated for the following kinds of trips and/or in the specified areas:

- Where there are concentrations of off-peak, nighttime commercial, recreational and cultural activity, particularly where that activity attracts a large proportion of tourists and is within a 5-minute taxi ride from Downtown.

- Shopping trips where the volume of purchased goods would make the use of public transit inconvenient or difficult.

- In residential areas, or near facilities and institutions where the facilitation of door-to-door trips is an absolute priority.

- Adjacent to regional transit connection points.

Freight carriers and delivery vehicles should be accommodated for making the following kinds of trips and/or in the described areas:

- Where there are concentrations of industrial and manufacturing facilities that depend on the processing, delivery and/or shipment of large quantities of goods and freight.

- For the bulk movement of refuse and other materials which would become a nuisance and health hazard if stored or accumulated on site.

- For the loading and unloading of goods and freight at retail and commercial establishments.

- At the transfer points where bulk equipment, goods and freight exchange modes of travel.

- Along rail or truck routes specifically needed to accommodate the movement, both local and inter-regional, of the activities described above.

- In areas suited for the storage of bulk equipment, goods and freight.

~~A multimodal transportation system preserves a wider range of choice and satisfies a larger number of peoples transportation needs than a single mode. However, there are certain types of trips in the city and region which would favor a single mode: for example, rail rapid transit to serve commuters between the regions three major city centers and the airports. In those instances, priority should be established in accordance with that modes superiority in satisfying travel needs and other elements of the Master Plan, including housing, recreation and urban design policies.~~

POLICY 6~~5~~

Assure expanded mobility for the disadvantaged.

Expansion of opportunities for the poor and the underemployed for work, education and recreation depend to a large extent on the adequacy of the transportation system in serving their needs and on the cost of travel to them. The transportation system should~~must~~ be used in part as a tool for improving the situation of less advantaged residents by providing inexpensive and convenient service to areas of growing employment, as well as to educational institutions, medical services and recreation facilities.

POLICY 7~~6~~

Develop a flexible financing system for transportation in which funds may be allocated according to priorities and established policies without unnecessary restriction~~ for priority improvements according to established policies~~.

~~Federal, state and even local financing available for transportation is generally restricted to certain modes of transportation or to certain kinds of improvements. There are funds earmarked for highway improvements, for rapid transit, and for local streets.~~

Flexibility in allocating funds is necessary for the maintenance and development of a multi-modal transportation system that is responsive to changing travel demands ~~requires that funds be available for allocation according to the need for specific projects~~. ~~To maintain flexibility,~~ Taxes and funds should not be restricted to a specific mode or type of improvement for long periods of time, as long as the re-allocations are consistent with the long-term goal of improving transportation.

~~**POLICY 7**~~

~~**Seek means to reduce peak travel demands.**~~

~~Peaking of travel demands during rush hours results not only in congested traveling conditions in the morning and evening periods, but in high public costs as well, since it is peak demand that the transportation system is designed to accommodate. Therefore, By spreading work trip arrival and departure times over a longer period the capacity of the system can be used more efficiently. For the city's transit system this means less crowding, shorter loading times, increased reliability of service and ultimately lower operating and capital costs. For the streets and highway system it means less congestion, less automobile emissions and a diminished necessity for high capacity freeways. Administrative devices such as staggering work hours, encouraging shoppers and visitors not to travel during peak hours, altering school hours, and implementing differential bridge tolls would spread the demand over a longer period of time and permit more efficient use of the transportation system.~~

POLICY 8

Develop a multi-modal emergency transportation plan for the city and encourage the development of complementary plans in the private and public sector, to provide for movement to and from emergency and health facilities from all areas of the city, and to and from the city and other Bay Area communities.

A system accommodating automobiles, surface transit, ferries and other water traffic, emergency aircraft, bicyclists and pedestrians, should be identified to ensure mobility and evacuation in face of a comprehensive variety of natural and man-made catastrophes. The extent of multi-modalism should reflect the possible scarcity of energy and fuel, and the disruption to existing infrastructure and rights-of-way.

OBJECTIVE 2

USE THE TRANSPORTATION SYSTEM AS A MEANS FOR GUIDING DEVELOPMENT AND IMPROVING THE ENVIRONMENT.

The use of a transportation system to guide the development and improvement of the city and the region is the necessary counterpart to its function in providing mobility for residents. ~~Mobility is not itself an ultimate goal; people only travel when there are places to which they want to go and activities in which they want to engage.~~ The transportation system should be used to ensure more than the mobility of the people and goods it serves, it must also ensure the preservation or creation of desired activities and facilities for all sectors of the city's population and economy. ~~Travel needs cannot be satisfied without consideration of other elements of city life.~~ The modes of transportation used, as well as the location of routes and design of the system, have a large influence on development patterns and the quality of the overall environment. Conversely, the use of land should support the function of the adjacent transportation facilities. Decisions concerning the location of large retail and employment centers, high-density housing and other projects that generate high volumes of traffic and transit ridership, should consider the impacts on the local and regional transportation system. ~~There must be recognition of the system's impact and conscious design and use of transportation improvements.~~ This relationship between transportation and land use must be recognized in order to facilitate desirable change and to preserve what is good.

POLICY 1

~~**Support and strengthen regional efforts toward a city-centered region through development of the regional rapid transit system.**~~
Use rapid transit and other transportation improvements in the city and region as the catalyst for desirable development, and coordinate new facilities with public and private development.

The development of an extensive network of rapid rail transit linking the major centers of the region is required if a regional, city-centered plan is to be achieved. Care must be taken to locate transit routes and development so that the transit system itself will encourage more intensive growth in both newly-planned and existing communities ~~or the development of well-planned new cities~~. Highways should also be located and designed to avoid encouraging scattered, unplanned patterns of growth that are not accessible by transit. Public and private improvements and developments should be coordinated with transportation projects in advance to ensure that advantage is taken of the opportunities afforded. Development should be regulated, however, so that it will be compatible with the policies of the Master Plan.

~~POLICY 2~~

~~**Use transportation improvements in the city as catalysts for desirable development, and coordinate new facilities with public and private development.**~~

~~Major transportation improvements, such as BART stations in San Francisco, may be expected to generate changes in land uses and developments geared to take advantage of the new access provided. Public and private improvements and developments should be coordinated with transportation projects in advance to ensure that advantage is taken of the opportunities afforded. Transportation improvements should be located and designed to support desirable development or services recommended in other elements of the Master Plan. Development should be regulated, however, so that it will be compatible with the areas surrounding new stations.~~

POLICY 23

Reduce pollution and noise.

Bicycling and walking, the quietest and cleanest forms of transportation, should be promoted whenever possible. Gasoline- and diesel-powered automobiles and ~~diesel~~ buses pollute the air and generate substantial noise, in comparison with electric vehicles. The city has long been committed to transit powered by electricity, and this commitment has maintained a high level of environmental quality. ~~The use of automobiles for travel and of motor coaches for mass transit must be limited. Technological changes may be forth-coming which will lower pollution. But until they are available the city should extend its commitment to an electrical transit system.~~ Future city programming should work toward noise abatement ~~tolerance~~ ordinances and other noise control actions, both by administrative and operational means. For instance, where it is not feasible to use the existing electric transit vehicles, diesel buses should be replaced by quieter and less polluting transit vehicles. Another example is the placement of stop signs in relation to topography to avoid substantial noise caused by acceleration and deceleration.

POLICY 34

Design and locate facilities to preserve the historic city fabric, the natural landscape and to protect views.

~~The Embarcadero Freeway has become for San Franciscans a symbol of insensitivity to the landscape in the design of transportation facilities. Its abrupt termination has become a symbol of San Franciscans determination to preserve the natural beauty of~~

~~the city.~~ Care must be taken to ensure that street and transit improvements are made to enhance the beauty and delicate fabric of the city and to protect views of the city, the bay, the ocean and the hills.

POLICY 4~~5~~

Organize the transportation system to reinforce community identity, improve linkages among interrelated activities and provide focus for community activities.

The manner in which the transportation system is organized ~~influences patterns of community association and neighborhood physical identity. Transportation decisions~~ may ~~therefore~~ contribute to or undermine social and environmental stability. Through traffic routes should not split neighborhoods or pose ~~insuperable~~ insurmountable barriers to movement among them. Street design and location of parking should contribute to the establishment of pedestrian-oriented neighborhood centers where residents may congregate. Major transit routes and specific feeder systems should be located to provide good access to and from neighborhood centers for nearby residents. Freight routes should have convenient access to industrial areas and to regional highway and rail systems, and should be designated to avoid conflicts with other types of traffic -- pedestrian, bicycle, commuter -- in the interest of safety and livability.

POLICY 5~~6~~

Provide incentives for the use of transit, carpools, ~~and~~ vanpools, walking and bicycling and reduce the need for new or expanded automobile and automobile parking facilities.

~~The alternatives to expanding automobile facilities are to make existing facilities serve more people and to use other ways of getting people where they want to go. Single occupancy automobile use is incompatible with the need to conserve energy and land, the need to reduce congestion on thoroughfares and the need to reduce auto emissions. Individuals, government agencies and private businesses have a responsibility to find and use ways to travel other than the single occupant private vehicle.~~

Actions which make transit more convenient, economical and reliable should continue to be a high priority in San Francisco. For those work trips which cannot conveniently be made by transit, carpooling provides efficient use of private vehicles and should be encouraged. Bicycling and walking should also be considered as important and appropriate modes of commuting. Transit fare subsidies, cash-out parking programs

where parking is subsidized, and transit fare discounts in place of parking validations encourage the use of alternatives to the private automobile.

- ~~Employers should be encouraged to provide incentives for transit use and carpooling by employees. A transit subsidy, such as the provision of a transit fast-pass , could be an alternative to the provision of free employee parking. Where an employer already has parking spaces available for employees, these spaces could be reserved for those persons who carpool.~~

- ~~Institutions should be encouraged to pursue transit alternatives for their employees, visitors and users. Access via existing transit is possible for most major institutions and its use should be encouraged by providing information on routes and schedules to all employees and visitors or clients. Where transit is not available or is inadequate, institutions should explore the possibilities of organizing carpools or commuter subscription buses, providing shuttle buses to major transit routes or advocating adjustments in existing Muni or regional transit to better serve the institution.~~

- ~~City government should encourage efficiencies in the use of the transportation system through cooperation with businesses and institutions and the provision of technical assistance in implementation of such programs. Consideration should be given to providing for the substitution of developer or building owner supplied transit or transit subsidies in lieu of otherwise required parking. The city's taxing power should be used to promote the efficient and appropriate use of the parking supply and to encourage the use of transit and carpooling. For instance, where it is appropriate to promote the use of existing off-street parking spaces for short-term parking, a lower parking tax rate could be imposed on spaces used for less than four hours. Additionally, an in-lieu tax on second and third vehicles might serve to control the number of automobiles in densely populated neighborhoods and encourage the use of transit for work trips.~~

~~Mass transit should be given priority for the following kinds of trips and/or in the described areas:~~

- ~~For work trips generally within San Francisco and other densely developed parts of the region, especially to all major employment centers.~~
- ~~For intercity trips between core areas of major cities and for travel to core areas in general.~~
- ~~For trips occurring generally during periods of high travel demands.~~
- ~~Where demand for travel between any two or more relatively compact or densely developed areas is high.~~

- ~~In areas where large numbers of people with limited means or low automobile ownership reside.~~
- ~~Where travel demand exceeds the capacity of an area to absorb more vehicular traffic without substantial environmental damage or where further capacity for automobile movement or storage is very costly.~~
- ~~Where required or useful to stimulate development.~~
- ~~For trips to major recreation areas and to sports, cultural and other heavily attended events.~~

~~Automobiles should be given priority for the following kinds of trips and/or in the described areas:~~

- ~~For trips occurring where transit is too inconvenient or not available, and for trips that by their nature are not adaptable to transit.~~
- ~~For intra-regional trips outside the major cities and for intercity trips between non-core areas of the major cities.~~
- ~~For work trips from outlying low-density residential areas to outlying places of employment.~~
- ~~Where business travel requires the use of an automobile.~~
- ~~In areas having the capacity to absorb additional vehicular traffic without substantial environmental damage or conflict with land uses and where transit would be prohibitively costly in relation to the number of riders served.~~

~~Walking, bicycling, or short-distance transit vehicles should be given priority for the following kinds of trips and/or in the specified areas:~~

- ~~In parks and other recreational areas, and where slow movement, bicycling or walking is part of a recreational experience or necessary to preserve the natural environment.~~
- ~~Where concentration of activity is so high that more convenient access among interrelated activities may be achieved by walking or limited distance people-movers than by other modes.~~
- ~~For short trips between residences and neighborhood convenience shopping and recreational facilities, and for intra-neighborhood visiting and socializing, where walking or neighborhood-oriented, short-distance transit vehicles (such as jitneys) provide a quick and convenient means of travel.~~

REGIONAL
(new text)

OBJECTIVE 1.

MAINTAIN AND ENHANCE SAN FRANCISCO'S POSITION AS A REGIONAL DESTINATION WITHOUT INDUCING A GREATER VOLUME OF THROUGH AUTOMOBILE TRAFFIC.

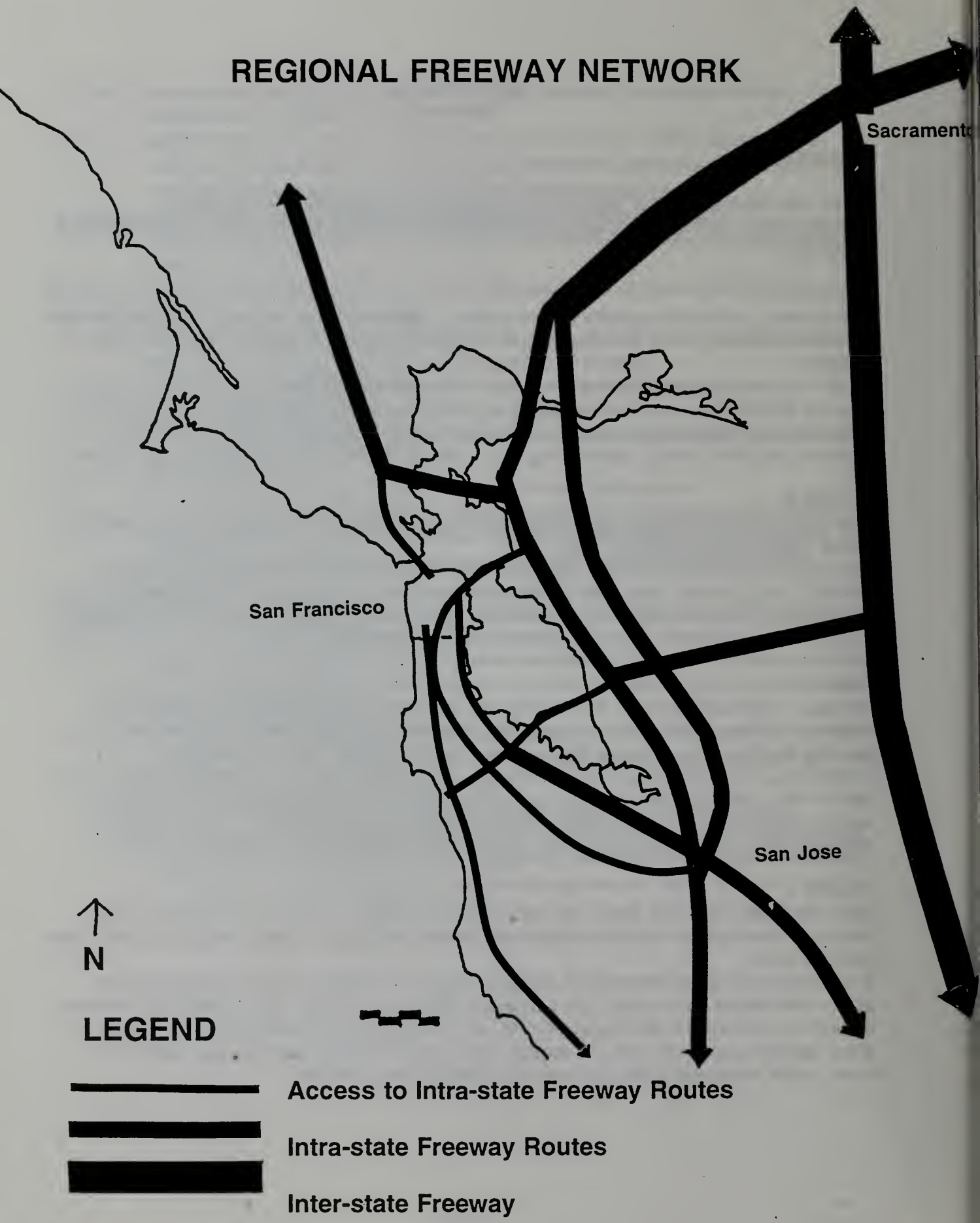
POLICY 1
The existing vehicular capacity of the bridges, highways and freeways entering the city should not be increased and, for single-occupant vehicles, should be reduced where possible.
Much of the existing street infrastructure and parking facilities within San Francisco are at capacity and cannot accommodate significant increases in automobile traffic. Managing the future transportation demand requires a balancing of travel modes, including a greater emphasis on public transit, ride-sharing, and other alternatives to single-occupancy vehicles.

POLICY 2
New elevated and surface freeways should bypass or terminate outside San Francisco, rather than pass through the city.
The space requirements, the questionable seismic soundness and the physically divisive effects of such freeway structures create significant problems in the city. Connections to any such freeway structures that are built outside the city should be made with at-grade arterials that are better integrated within the existing urban street system.

POLICY 3
Develop an efficient system of arterials and thoroughfares to distribute traffic from regional freeways within and through San Francisco's street grid in conjunction with the Bay Region's nine-county Metropolitan Transportation System (MTS).
Unlike many of the Bay Area's newer arterials, many of San Francisco's streets designated for this function were originally designed as residential streets. Landscaping sidewalks and median strips, using sound-insulation materials on adjacent buildings and other buffering measures should be taken along these streets to mitigate the negative impacts of traffic.

POLICY 4
Promote I-880, I-80 (East Bay), 101 (North of San Rafael), I-580, I-680 and I-5 as the principal freeways for through automobile traffic and freight truck traffic in the Bay Area and the state.
A few regional freeway segments in the city, such as 101/280 to the Bay Bridge and 101 across the Golden Gate Bridge, are necessary connections to the regional and state freeway system for residents of San Francisco and the northern parts of the Peninsula. However, these segments are most often at capacity and cannot accommodate through traffic from a wider region as efficiently as the larger suburban freeway network.

REGIONAL FREEWAY NETWORK



OBJECTIVE 2

MAINTAIN AND ENHANCE SAN FRANCISCO'S POSITION AS THE HUB OF A REGIONAL, CITY-CENTERED TRANSIT SYSTEM.

POLICY 1

Rapid transit lines from all outlying suburban corridors should lead to stations and terminals that are adjacent or connected to each other in the downtown hub of San Francisco.

No other city in the Bay Area is served with such a comprehensive, region-wide transit system. Transit riders traveling from one end of the region to the other often must make transfers in San Francisco. Whenever possible, a regional transit corridor should pass through rather than terminate within downtown San Francisco in order to speed through trips and minimize the space needs for turnback and layover facilities in the downtown area.

POLICY 2

Increase transit ridership capacity in all congested regional corridors.

Making transit an attractive alternative to the automobile is difficult in suburbs that were developed primarily for automobile access. Increasing the frequency and capacity of regional transit service makes transit more convenient, and is more cost-effective when automobile congestion provides its own incentive for riding public transit.

POLICY 3

Where significant transit service is provided, bridges and freeways should have priority transit treatment, such as exclusive transit lanes.

Allowing transit to operate more freely in traffic, especially on freeways and bridges that are subject to traffic congestion, helps make them a more visible and desirable alternative to the automobile.

POLICY 4

Integrate future rail transit extensions to, from, and within the city as technology permits so that they are compatible with and immediately accessible to existing BART, Caltrain or Muni rail lines.

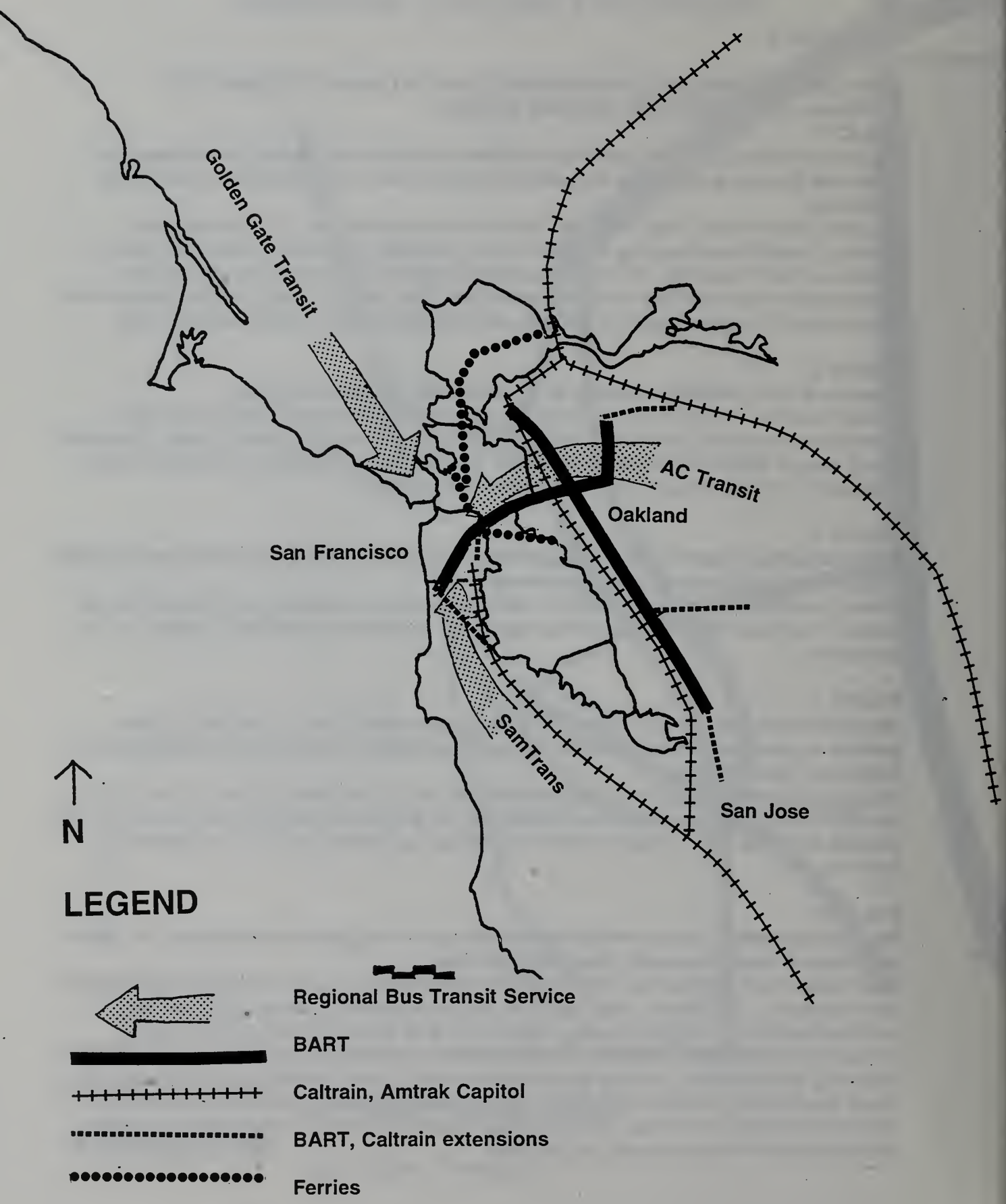
Integration includes the physical transit facilities as well as the fare structure. Since a forced transfer from one transit system and another can be a significant deterrent to using transit, the greatest efforts should be made to make the transfer as convenient and uncomplicated as possible.

POLICY 5

Provide convenient transit service that connects the regional transit network to major employment centers outside the downtown area.

Many people from outside San Francisco commute to places of work in San Francisco away from downtown. In addition, many San Franciscans commute to places of employment outside downtown or outside the city. While many take transit and rely on connections between local and regional transit, many drive and contribute to peak-hour traffic congestion. Improving the frequency, capacity and operating speed of local transit service from regional transit connections to large employment centers outside downtown will help make transit an attractive alternative to driving. Locating these large employment centers adjacent to high-capacity transit service is equally as important.

REGIONAL TRANSIT NETWORK



POLICY 6

Facilitate transfers between different transit modes and services by establishing simplified and coordinated fares and schedules, and by employing design and technology features to make transferring more convenient.

Examples include providing links between transit platforms so that connections can be made directly, with a minimum of walking and entry/exit of fare areas. Monitors that announce arrivals, departures and the progress of transit vehicles and orientation maps should be installed to ease the uncertainty and anxiety of waiting passengers.

POLICY 7

Locate outlying rapid transit stations close to the commercial and high-density residential districts and employment centers of each suburban community.

Many outlying, suburban rapid transit stations are located adjacent to freeways and surrounded by large surface parking lots. This pattern of development discourages transit use for those who live in the central cities and come to the suburban areas to work, shop or visit. Locating suburban stations within easy walking distance to the central core of outlying towns makes transit a more viable means of arrival for more people, reinforces the traditional commercial town centers and, by being located in higher-density neighborhoods, also promotes commuting by transit to other communities for suburban residents. Consolidating surface parking into parking garages with other mixed-uses, accommodates automobile drivers who transfer to rapid transit while allowing more efficient and pedestrian-accessible use of land around the station.

POLICY 8

Expand and coordinate the use of ferries, water taxis and other forms of water-based transportation with each other and with landside transportation in waterfront communities in San Francisco and across the bay, using San Francisco's Ferry Building as the main transfer point.

Water transit schedules and fares should be coordinated to accommodate riders making both local and regional trips. Water transit service should be coordinated with landside transit operators as well. The creation of a regional ferry consortium would provide a forum for ferry operators to share information, facilities and resources and to coordinate planning.

OBJECTIVE 3

SUPPORT AND ENHANCE THE ROLE OF SAN FRANCISCO AS A MAJOR DESTINATION AND DEPARTURE POINT FOR TRAVELERS MAKING INTERSTATE, NATIONAL AND INTERNATIONAL TRIPS.

POLICY 1

Support and accommodate the expansion of San Francisco International Airport, while balancing this expansion with the protection of the quality of life in the communities that surround the Airport.

San Francisco International Airport is one of the world's busiest airports and is of importance to a region extending far beyond the boundaries of the Bay Area. Expansion is necessary for the airport and the Bay Area to maintain its viability and function in the growing Pacific Rim. Recognizing and balancing the airport's regional significance, the livability of adjacent communities and the economic forces driving airport expansion, a reduction of expansion

impacts on the communities, such as the improvement of public transportation services, should be encouraged.

POLICY 2
Develop direct transit connections from downtown to the Airport that will maximize convenience and minimize confusion for airport patrons.
The Airport is the port of entry for most tourists and businesspeople. Visitors who may be unfamiliar with the region and who have little free time seek convenience, simplicity and directness in making the trip from the airport to Downtown. Walking distances, tranfers and waiting time should be kept to a minimum for airport patrons, who are often fatigued from traveling and burdened with luggage.

POLICY 3
Encourage the development of a high-speed water transit system from the Airport to the Ferry Building and to Oakland Airport to improve the efficiency and flexibility of the Airport's role in accommodating large numbers of domestic and international air passengers.
Linking the Oakland and San Francisco airports with a rapid shuttle system will enable travelers to use the two airports as virtually a single facility and allow each more opportunity to specialize in distinct travel markets, such as intrastate, domestic and international flights. A link to the Ferry Building would provide travelers with direct access to a broad network of transit options throughout the region.

POLICY 4
Encourage the use of public transportation and improve its services between the airport and all Bay Area communities, for airport employees as well as air passengers.

POLICY 5
Develop high-speed rail that links downtown San Francisco directly to all major interstate and national passenger rail corridors as the principle alternative to interstate air travel, and as the primary means to relieve air traffic congestion
The station should be integrated with the transit network of the city and region.

POLICY 5
Secure a berth for cruise ships in an attractive location, well-served by public transportation, to enhance San Francisco as a recreational port destination.

OBJECTIVE 4

DEVELOP REGIONAL, MULTI-MODAL FACILITIES FOR THE EFFICIENT MOVEMENT OF FREIGHT AND GOODS

POLICY 1
Designate expeditious routes for freight trucks between industrial and commercial areas and the regional and state freeway system to minimize conflicts with automobile traffic and incompatibility with other land uses.

POLICY 2

Upgrade and modernize port facilities and landside operations, responding to new technologies, specializations and markets, to enhance the commercial significance of the port of San Francisco and the other Bay Area ports as a unified region competing with other ports on the West Coast.

POLICY 3
Encourage the use of water transportation, such as freight ferries and shuttles, to facilitate the region-wide movement of goods and cargo.

POLICY 4
Identify new freight rail corridors and enhance existing ones to improve and shorten links between key freight distribution points in the city and the main interstate railroads, and to minimize conflicts with pedestrian, street and passenger rail traffic.
The Dumbarton Bridge provides a shorter, more direct rail link to the East Bay than a route through the South Bay and minimizews conflicts with the peninsula commuter rail service. Accommodating multiple rail servers in the city, particularly to the waterfront, offers more opportunities and better access for the movement of freight.

POLICY 5
Develop the facilities and accessory transportation systems serving the Airport to accommodate its growing role as a freight distribution center.
Facilitating intermodal transfers to air travel includes the development of such support services as expanded small package and container handling facilities for trucks and freight ferry services, and a rail stop in the airport vicinity for a rail-air exchange of freight.

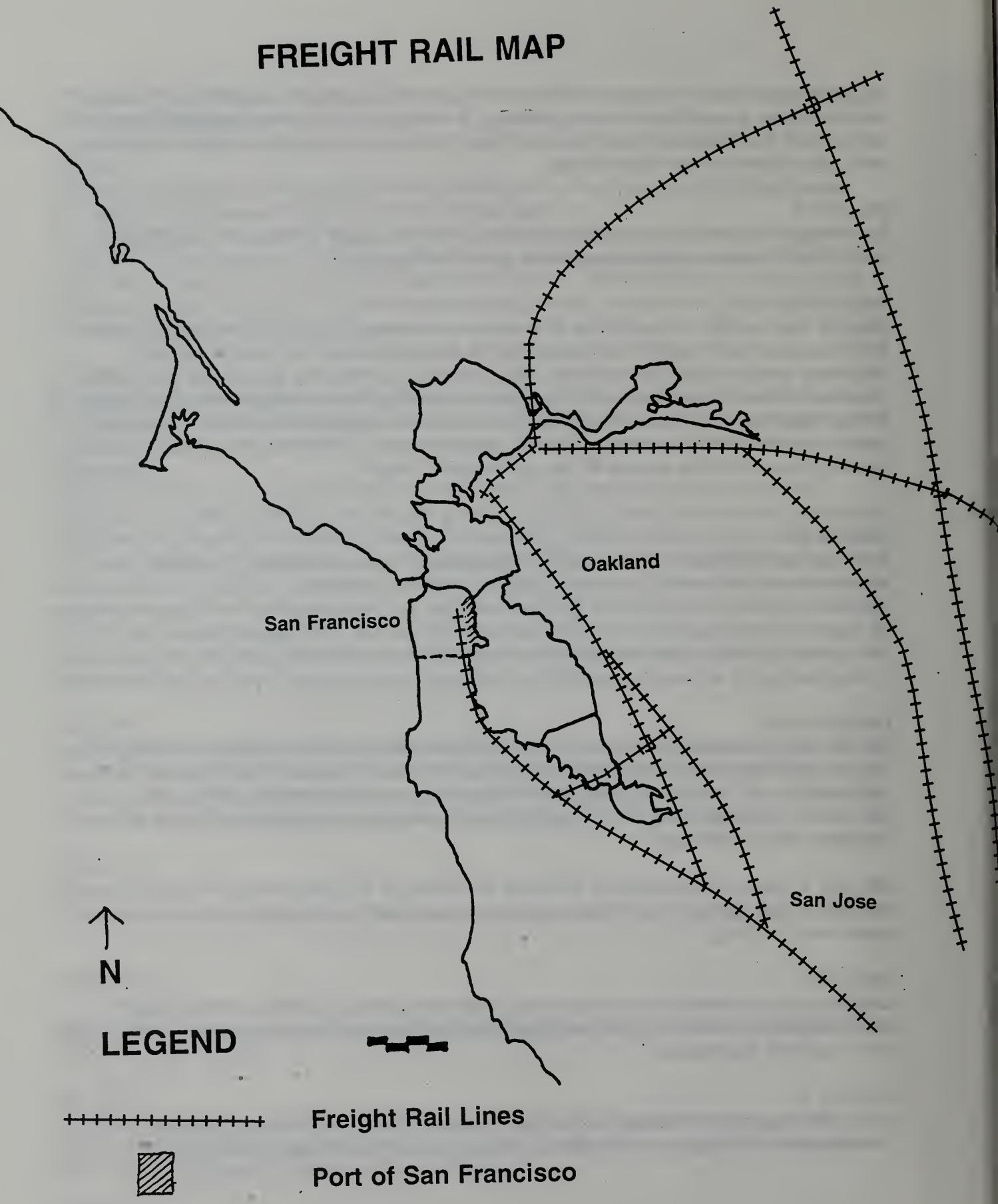
OBJECTIVE 5
DEVELOP A PARKING STRATEGY THAT ENCOURAGES SHORT-TERM PARKING AT THE PERIPHERY OF DOWNTOWN AND LONG-TERM INTERCEPT PARKING AT THE PERIPHERY OF THE URBANIZED BAY AREA TO MEET THE NEEDS OF LONG-DISTANCE COMMUTERS TRAVELING BY AUTOMOBILE TO SAN FRANCISCO OR NEARBY DESTINATIONS.

POLICY 1
Reserve a majority of the off-street parking spaces at the periphery of downtown for short term parking.

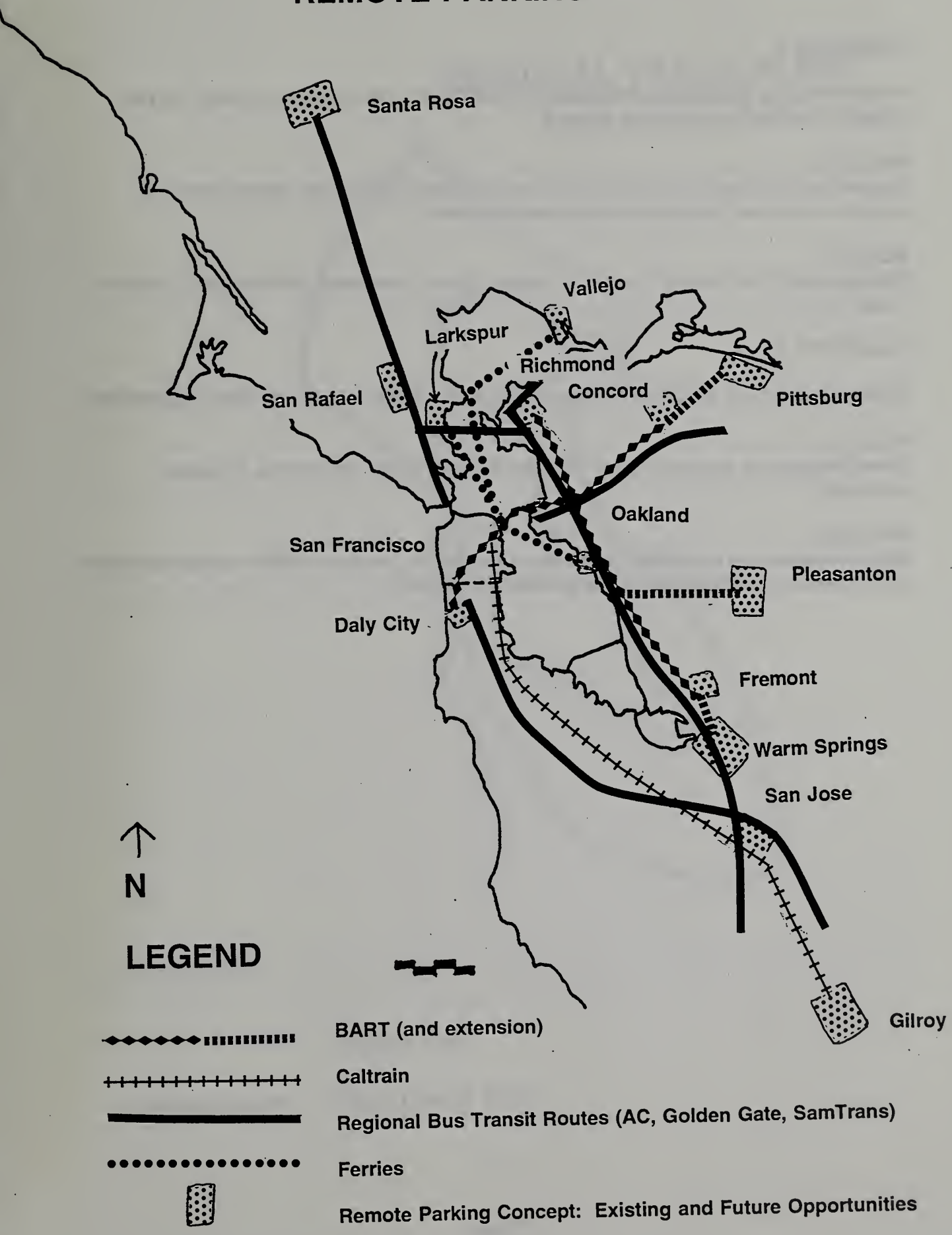
POLICY 2
Outlying transit terminals and adjacent commuter parking facilities of the regional transit systems leading to San Francisco should be well-marked and easily accessible from regional highways.

POLICY 3
Maintain a supply of parking commensurate with demand at outlying intercept parking facilities that have good connections to transit and ride-sharing opportunities.

FREIGHT RAIL MAP



REMOTE PARKING PLAN



OBJECTIVE 6

MAINTAIN AND ENHANCE REGIONAL PEDESTRIAN AND HIKING ACCESS TO THE COAST, THE BAY AND RIDGE TRAILS.

POLICY 1
Ensure that the Coast Trail, the Bay Trail and the Ridge Trail remain uninterrupted and unobstructed where they pass through San Francisco.

POLICY 2
Clearly identify the Citywide Pedestrian Network where it intersects with the Coast, Bay and Ridge Trails.

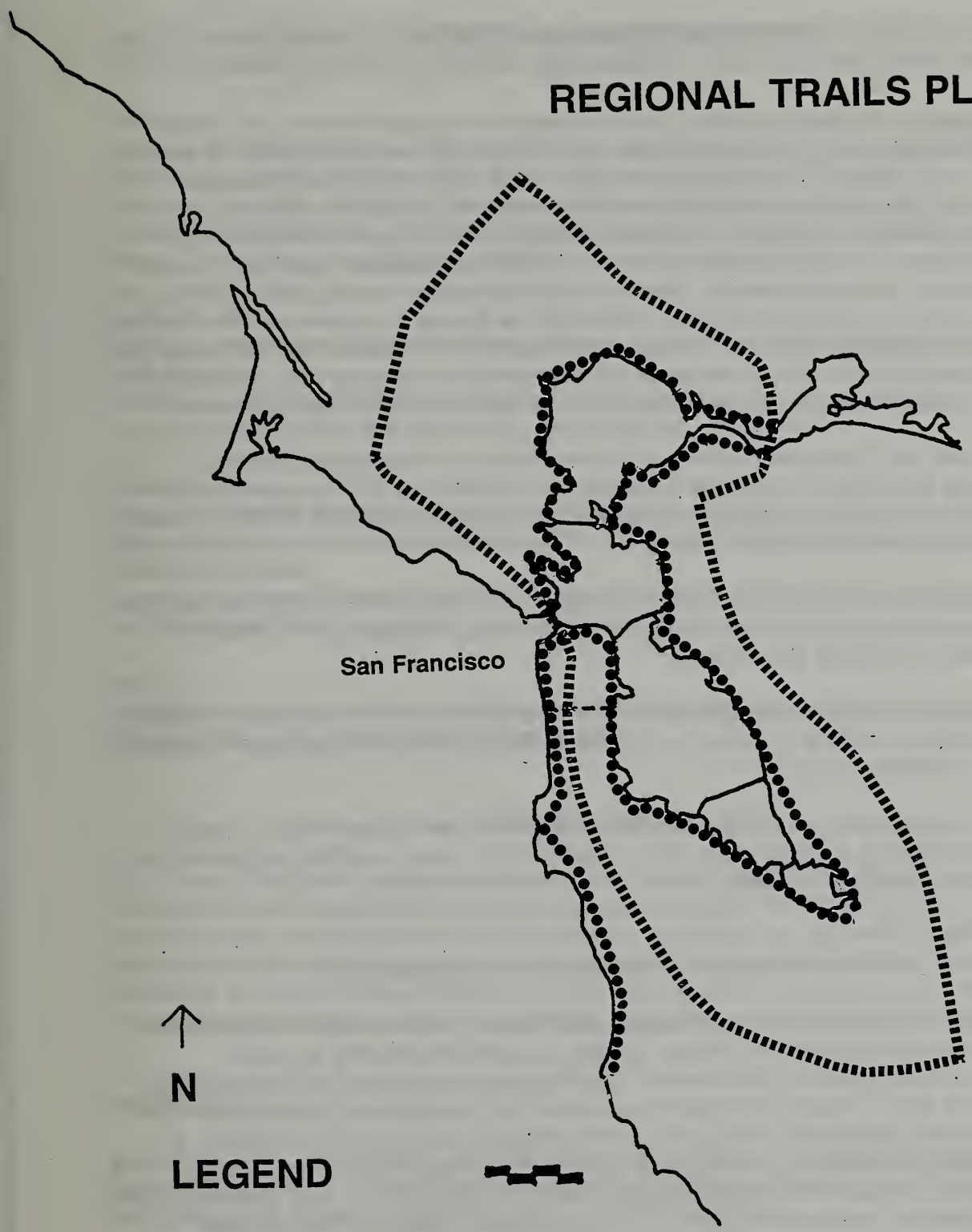
OBJECTIVE 7

IMPROVE BICYCLE ACCESS TO SAN FRANCISCO FROM ALL OUTLYING CORRIDORS.

POLICY 1
Allow bicycles on regional transit vehicles such as trains and ferries whenever practical.

POLICY 2
Where bicycles are prohibited on roadway segments, provide parallel routes accessible to bicycles or shuttle services that transport bicycles.

REGIONAL TRAILS PLAN



LEGEND

Ridge Trail

Bay, Coast Trail

CONGESTION MANAGEMENT

(new text)

With the increase in complex commuting patterns created by decentralization and reverse commuting in the Bay Area, such problems as traffic congestion and deteriorating air quality have become more severe. State legislation requires that each urban county develop a Congestion Management Program to address these problems. Under the Program, all incorporated jurisdictions within the county are required to develop and implement a Trip Reduction Ordinance, which calls for employers to implement measures designed to reduce the total number of private automobile. San Francisco recognizes that the most effective way to reduce the number of single-occupancy vehicle trips is through a cooperative effort between local jurisdictions and both large and medium-size employers. In addition, the city recognizes that transportation involves the movement of people, rather than vehicles only. Methods of measuring the performance of the city's transportation system should reflect this concept.

The Transit First policy, adopted by the San Francisco Board of Supervisors in 1973, anticipated state and regional strategies to mitigate the problems of traffic congestion. In addition, three other transportation planning strategies are being applied to identify and avoid potential transportation deficiencies:

- Travel Demand Management (TDM) - a coherent set of policies and programs designed to improve the efficiency of the transportation system by managing the demand for transportation facilities and services;

- Transportation Systems Management (TSM) - the application of construction, operational and institutional actions to make the most productive and cost-effective use of existing facilities and services; and

- Parking Management - a set of measures designed to discourage the use of single occupant vehicles; parking availability is closely tied to pricing controls and preferential treatment of rideshare vehicles.

TRANSPORTATION PERFORMANCE MEASURES

In order to address deficiencies in the transportation system, which includes transit systems, streets, sidewalks and parking and loading facilities, decision makers rely on certain measurements of the system's performance. Traditionally, transportation performance was measured by the level of service at street intersections or the number of miles travelled per vehicle -- measures that dealt primarily with motor vehicles. However, these methods of measurement are not well-suited for measuring the performance of alternative modes of transportation to the automobile, such as transit, walking or bicycling. In San Francisco, these alternative modes are not only desirable, they are the primary means of transportation for many types of trips.

OBJECTIVE 1

DEVELOP AND EMPLOY METHODS OF MEASURING THE PERFORMANCE OF THE CITY'S TRANSPORTATION SYSTEM THAT RESPONDS TO ITS MULTI-MODAL NATURE.

Policy 1
Assess the performance of the city's transportation system by measuring the movement of people rather than merely the movement of vehicles.
There are a variety of indexes that measure the comprehensive variety of travel modes in San Francisco better than Level Of Service or Vehicle-Miles of Travel, including Modal Split, Person Throughput, Accessibility (proximity of people to activities).

Policy 2
Employ performance measures that address the problems of transportation deficiencies.
Congestion in itself is better perceived as a problem when the specific results are considered, such as hours of delay and the volume of air pollution emissions.

Policy 3
Employ methods that are easily measured, understandable, and useful both for determining the level of deficiency and for comparing alternatives with existing forecasting tools.
As such, the measurements would be of greater value to decision makers, engineers and concerned community members.

Policy 4
Consider the transportation system performance measurements in all decisions for projects that affect the transportation system.

TRANSIT FIRST POLICY

The Transit First policy is aimed at restoring the balance to a transportation system long dominated by the automobile, and improving overall mobility for all residents and visitors when reliance chiefly on the automobile would result in severe transportation deficiencies. It encourages multi-modalism, the use of transit and other alternatives to the single-occupant vehicle as a mode of transportation, and gives priority to the maintenance and expansion of the local transit system and the improvement of regional transit coordination.

OBJECTIVE 2

MAINTAIN PUBLIC TRANSIT AS THE PRIMARY MODE OF TRANSPORTATION IN SAN FRANCISCO AND AS A MEANS THROUGH WHICH TO GUIDE FUTURE DEVELOPMENT AND IMPROVE REGIONAL MOBILITY AND AIR QUALITY.

POLICY 1

Maintain and improve the Transit Preferential Streets program to make transit more attractive and viable as a primary means of travel.
The Transit Preferential Streets program includes measures to improve transit vehicle speeds and to minimize the restraints of traffic on transit operations.

POLICY 2

Continue to favor investment in transit infrastructure and services over investment in highway development and other facilities that accommodate the automobile.
Every decision to direct expenditures toward improving congestion and parking conditions should first consider the improvement of transit operations.

POLICY 3

Encourage development that efficiently coordinates land use with transit service, requiring that developers address transit concerns, including bicycle and pedestrian access to transit facilities, as well as mitigate traffic problems.

POLICY 4

Encourage the development of one or more multi-service transportation outlets for the sale of transit fare instruments and the provision of other kinds of trip information.

TRANSPORTATION DEMAND MANAGEMENT

The purpose of Transportation Demand Management (TDM) is to reduce the number of private automobile trips and to bring about an overall reduction in automobile dependency through education, assistance and incentives. TDM strategies are most successful where they are integrated with land use policies and where the private and public sectors both assist individuals in managing their travel needs. The implementation and administration of these programs should be streamlined to ensure a maximum level of coordination between the public and private sectors.

OBJECTIVE 3

DEVELOP AND IMPLEMENT PROGRAMS IN THE PUBLIC AND PRIVATE SECTORS, WHICH WILL SUPPORT CONGESTION MANAGEMENT AND AIR QUALITY OBJECTIVES, MAINTAIN MOBILITY AND ENHANCE BUSINESS VITALITY AT MINIMUM COST.

POLICY 1

Develop and implement strategies which provide incentives for individuals to use public transit, ridesharing, bicycling and walking to the best advantage, thereby reducing the number of private auto trips.

Such strategies may include the provision of shower facilities for bicyclists and walkers, subsidized transit passes, and "cash-out" parking programs for persons who do not drive to facilities where automobile parking is subsidized.

POLICY 2

Build on successful efforts implemented at numerous private sector worksites, such as the downtown Transportation Brokerage Program and other voluntary programs, and adapt such programs for application in new areas as appropriate.

POLICY 3

Implement private and public sector TDM programs which support each other and explore opportunities for private-public responsibility in program implementation.

POLICY 4

Encourage private and public sector cooperation in the promotion of alternative work programs designed to reduce congestion and the number of automobile trips.

Telecommuting and work-at-home programs can help achieve the desired traffic reductions. Flex-time policies must include coordination with the provision of transit services to assure that an alternative work schedule does not result in an increase in the number of automobile trips.

POLICY 5

Phase program implementation in a manner that is most cost effective, and most reasonable in terms of the availability of alternative travel modes and types of trips to be served.

POLICY 6

Maximize the utilization of existing sources of revenue targeted or available for program implementation and monitoring to offset additional funding requirements.

POLICY 7

Promote coordination between providers of transportation management services, where possible, to the enhance the quality of individual programs.

POLICY 8

Encourage the creation of Transportation Management Associations where specific needs are identified and coordination with other similar associations and agencies is pursued.

OBJECTIVE 4

PROMOTE THE DEVELOPMENT OF MARKETING STRATEGIES THAT ENCOURAGE AND FACILITATE THE USE OF TRANSIT AND OTHER ALTERNATIVES TO THE SINGLE-OCCUPANT AUTOMOBILE FOR SHOPPING, RECREATION, CULTURAL AND OTHER NON-WORK TRIPS.

POLICY 1

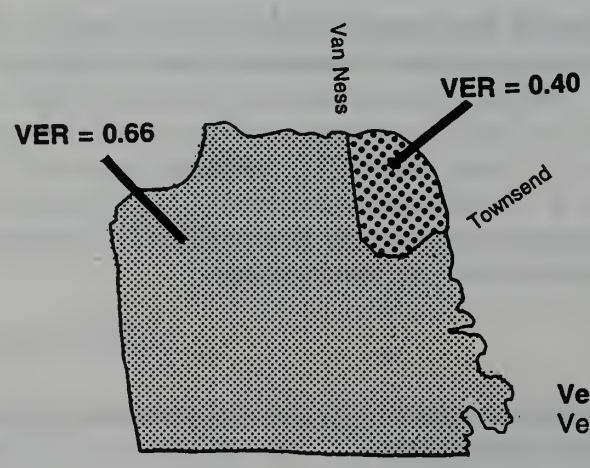
Encourage the use of alternatives to the automobile in the advertisement of businesses, recreational and cultural attractions by identifying their proximity to transit facilities and significant landmarks.

POLICY 2

Promote the identification of core fixed guideway and regional transit lines, such as BART, Muni Metro, cable car, Caltrain and ferry lines, on maps and literature designed for tourists and visitors.

POLICY 3

Use Transit Centers and Visitor Information Centers for the promotion of transit services and the dispensation of transit service information.



Vehicle/Employee Ratio (VER):
Vehicles per employees at work sites in San Francisco

TRANSPORTATION SYSTEMS MANAGEMENT

Transportation Systems Management (TSM) alternatives are designed to address current transportation system needs through more efficient use of existing transportation facilities. TSM strategies manage the demand and optimize the supply of existing resources to achieve transportation-related goals and attempt to improve efficiency through the provision of more frequent transit service or the enhancement of transit operating conditions.

OBJECTIVE 5

DEVELOP AND IMPLEMENT A PLAN FOR OPERATIONAL CHANGES AND LAND USE POLICIES THAT WILL MAINTAIN MOBILITY AND SAFETY DESPITE A RISE IN TRAVEL DEMAND THAT COULD OTHERWISE RESULT IN SYSTEM CAPACITY DEFICIENCIES.

POLICY 1

Reduce road congestion through the implementation of traffic control strategies, such as signal-light synchronization and turn controls, that improve vehicular flow.

POLICY 2

Improve transit operation by implementing strategies that facilitate and prioritize transit vehicle movement and loading.

POLICY 3

Reduce congestion by encouraging alternatives to the private auto through the reservation of right-of-way and enhancement of other facilities dedicated to multiple modes of transportation.

POLICY 4

Encourage the use of alternative fuels for City vehicles as a means of reducing toxic automobile emissions.

POLICY 5

Reduce peak period congestion through the promotion of flexible work schedules at worksites throughout the City.

POLICY 6

Encourage the use of transit and other alternatives modes of travel to the private automobile through the positioning of building entrances that prioritizes access from these modes.

PARKING MANAGEMENT

Parking management is one of the most effective employer-based strategies for reducing vehicle trips and increasing employee use of alternative modes. In San Francisco, employers have mitigated congestion and air quality and benefitted financially by implementing mandatory and voluntary parking management programs. With these congestion management policies, the downtown parking supply is adequate to satisfy demand for long-term and short-term needs. Given the sheer density of development, an increase in parking supply within the downtown could lead to further traffic congestion and the negative impacts associated with it.

OBJECTIVE 6

DEVELOP AND IMPLEMENT PROGRAMS THAT WILL EFFICIENTLY MANAGE THE SUPPLY OF PARKING AT EMPLOYMENT CENTERS THROUGHOUT THE CITY SO AS TO DISCOURAGE SINGLE-OCCUPANT RIDERSHIP AND ENCOURAGE RIDESHARING, TRANSIT AND OTHER ALTERNATIVES TO THE SINGLE-OCCUPANT AUTOMOBILE.

POLICY 1

Reduce parking demand through the provision of comprehensive information that encourages the use of alternative modes of transportation.

POLICY 2

Reduce parking demand where parking is subsidized by employers with "cash-out" programs in which the equivalency of the cost of subsidized parking is offered to those employees who do not use the parking facilities.

POLICY 3

Reduce parking demand through the provision of incentives for the use of carpools and vanpools at new and existing parking facilities throughout the City.

POLICY 4

Manage parking demand through appropriate pricing policies including the use of premium rates near employment centers well-served by transit, walking and bicycling, and progressive rate structures to encourage turnover and the efficient use of parking.

POLICY 5

Reduce parking demand through limiting the absolute amount of spaces and prioritizing the spaces for short-term and ride-share uses.

POLICY 6

Reduce parking demand through locating on-site parking facilities for single-occupant vehicles in more remote locations than ride-share vehicle and bicycle parking and public transit access.

OBJECTIVE 7

DEVELOP AND IMPLEMENT PARKING MANAGEMENT PROGRAMS IN THE DOWNTOWN THAT WILL PROVIDE ALTERNATIVES ENCOURAGING THE EFFICIENT USE OF THE AREA'S LIMITED PARKING SUPPLY AND ABUNDANT TRANSIT SERVICES.

POLICY 1

Discourage the provision of any new long-term parking downtown and near major employment centers.

POLICY 2

Encourage collaboration and cooperation between property owners and developers to allow for the most efficient use of existing and new parking facilities.

VEHICLE CIRCULATION

(revised text)

OBJECTIVE 1

ESTABLISH A STREET HIERARCHY ~~THOROUGHFARES~~ SYSTEM IN WHICH THE FUNCTION AND DESIGN OF EACH STREET ARE CONSISTENT WITH THE CHARACTER AND USE OF ADJACENT LAND.

There should be a hierarchical system of streets functioning in accordance with the planned movement of vehicles and the management of congestion. Street design, capacity and treatment should be a direct manifestation of the streets intended use in satisfying both present and prospective travel demand, and also its non-traffic purposes such as open space and pedestrian movement. It is recognized that in some cases it will be necessary to determine a maximum level of traffic for which street capacity will be provided, implying a tolerable level of congestion as a constraint, if other objectives of the city are to be attained.

~~Two forms of action are required:~~ This element seeks to balance the needs for vehicle circulation in the provision for through traffic on major ~~thoroughfares~~ arterials and discouragement of it on local streets, particularly residential streets. ~~To the greatest extent possible land use bordering major thoroughfares should not be primarily residential.~~ The following factors determine the selection of major and secondary ~~thoroughfares~~ arterials:

- The width of the right-of-way relative to traffic capacity required;
- The extent of transit use on the street;
- Land uses bordering the street;
- Safety of the street for moderate- and high-speed traffic;
- The relation of the street to the definition of the neighborhood by its residents;
- The presence or absence of conflicts caused by driveways, parking, and deliveries to commercial uses.

~~In order to effectuate the policy to divert through traffic from neighborhoods, it is necessary that increased thoroughfare capacity be balanced by simultaneous reductions on local streets. Appropriate actions will ensure not only that traffic is channeled as intended but also that new usable open space is created and that the residential environment is enhanced.~~

POLICY 1

Wherever feasible, divert through automobile and commercial ~~truck~~ traffic from residential neighborhoods onto major and secondary ~~thoroughfares~~ arterials, and limit major ~~thoroughfares~~ arterials to nonresidential streets wherever possible.

Major and secondary ~~thoroughfares~~ arterials are to carry traffic among districts in the city. Local streets are intended only to provide access to and from homes and other uses within each neighborhood. However, many residential streets function as major or secondary arterials, and because there are no other alternatives, the function of these streets is needed to prevent traffic from spreading onto other residential streets. In such cases, buffering measures such as landscaping in sidewalks and medians should be taken to mitigate the impacts of traffic. ~~To provide more efficiently for long-distance movements and to keep local streets free from heavy traffic, street design and traffic management should ensure the diversion of through traffic around neighborhoods. The Urban Design Element indicates the application of this policy in more detail and designates protected residential areas. Heavy truck traffic should be removed from residential streets and confined mainly to freeways and certain very limited nonresidential feeder streets.~~

POLICY 2

Design streets for a level of traffic that serves, but will not cause a detrimental impact on adjacent land uses.

The need for traffic carriers must be balanced against the adverse effects of heavy traffic on the use of adjacent land and the quality of the environment. ~~The needs of residents for peace and quiet, safety from harm, and useful open space must be given consideration. Each area and each street of the city have different characteristics which determine the level of traffic which can be absorbed without serious adverse impacts.~~ The following factors should be the basis for a judgment on the acceptable levels of traffic on a specific street:

- The predominance of land uses fronting the street;
- The distance between the curb and building line established by sidewalk width or setback;
- The presence or absence of buffering between street and building in the form of landscaping, change in elevation, or similar condition;
- The level of pedestrian and bicycle traffic;
- The proportion of the street which is residential in land use;
- Whether residences face the street;
- The presence of hospitals, schools, parks, or similar facilities on or near the street.

The widening of streets at the expense of sidewalks or of setbacks should not occur where space is necessary for pedestrian movement, buffering from noise, useful open space and landscaping. This is especially true in densely populated neighborhoods with little public or private open space. No additional sidewalk narrowings, tow-away zones and one-way streets should be instituted in a residential neighborhood if ~~the intention is to benefit the commuter to the detriment of the~~ it would compromise the safety and comfort of the pedestrian resident. Street restripings and widenings may be appropriate in industrial areas where access for oversize freight vehicles is

N

VEHICULAR STREET MAP

Scale : 1" = 1.25 miles

LEGEND

CMP Network Streets

- Freeway
- Major Arterial
- Transit Conflict Street

Other Streets

- Secondary Arterial
- Recreational Street

N

CONGESTION MANAGEMENT NETWORK

Scale : 1" = 1.25 miles

LEGEND

CMP Network Streets

- Freeway
- Major Arterial
- Transit Conflict Street

important, but these projects should not reduce or eliminate the efficient movement of transit vehicles and bicycles.

POLICY 3

The existing single-occupant vehicular capacity of the bridges, highways and freeways entering the city should not be increased and should be reduced if needed to increase the capacity for high-occupancy vehicles, transit and other alternative means of commuting, and for the safe and efficient movement of freight trucks, ~~where possible~~.

~~The established policy of limiting access into and through the city by automobiles should be maintained. This policy should work in conjunction with policies calling for the provision of mass transit for commuter travel to San Francisco.~~ It is recognized that provision for further vehicular access into the city would conflict with the environmental objectives of the city, overload the city street system, and jeopardize the city's commitment to mass transit. This policy allows for the introduction of exclusive ~~bus~~transit, bike and carpool/vanpool lanes on bridges, highways and freeways where these lanes are compatible with the overall ~~transit~~ transportation system's needs ~~and will help provide better service~~.

POLICY 4

Discourage high-speed through traffic on local streets in residential areas through traffic "calming" measures that are designed not to disrupt transit service or bicycle movement, including:

- **Sidewalk bulbs and widenings at intersections and street entrances;**
- **Lane off-sets and traffic bumps;**
- **Narrowed traffic lanes with trees, landscaping and seating areas; and**
- **colored and/or textured sidewalks and crosswalks.**

POLICY 5

Discourage ~~non-recreational and~~ non-local, through ~~travel~~ automobile traffic in and around parks and along the shoreline recreation areas.

Streets in large parks, around small parks and along recreational parts of the shoreline should function primarily for access to recreational facilities and for scenic driving, not as thoroughfares. Heavy or fast surface traffic endangers pedestrians, cuts off access to recreation and reduces the pleasure of being in parks by causing noise, pollution and visual disharmony. Excessive automobile traffic also inhibits the movement of freight rail, freight and delivery trucks and vans that supporting the maritime uses along the waterfront. Pedestrian entrances to parks should be at street intersections to the extent possible. ~~Streets adjacent to or within parks and along the shoreline should to the greatest extent possible be designed and controlled to reduce their use as throughways. They should offer opportunities for leisurely, scenic driving consistent with pedestrian, equestrian and bicycle movements along and across the street.~~

OBJECTIVE 2

PROVIDE FOR CONVENIENT AND SAFE MOVEMENT AMONG DISTRICTS IN THE CITY DURING OFF-PEAK ~~NORMAL~~ TRAVEL PERIODS.

~~The primary purpose of those segments of the thoroughfares system designed for inter-district movements is to provide for efficient, convenient and safe travel, integrating the city into a functional whole. At the same time it is recognized that congestion can never be eliminated completely, especially during periods of peak demand.~~ The intent is to provide a convenient vehicular system of streets and arterials which functions well in meeting normal traffic demands, especially those included in the Congestion Management Plan. At the same time it is recognized that congestion can never be eliminated completely, especially during periods of peak demand.

POLICY 1

Eliminate unnecessary cross traffic conflicts and improve traffic flow along major ~~thoroughfares~~ arterials.

Excessive numbers of intersections on major ~~thoroughfares~~ arterials reduce the average speed of traffic and encourage use of local streets for through movements. ~~Intersections with local streets~~ Cross traffic should be eliminated, where possible, if needed to speed the flow of traffic on the arterials intended to carry the bulk of inter-district travel and to reduce accidents. In some cases, where two major ~~thoroughfares~~ arterials meet, it may be necessary to create grade separations to avoid conflicts. However, ~~less costly~~ measures to minimize this conflict that are less costly and disruptive should be used wherever possible.

~~The system of~~ Traffic signal ~~light~~ synchronization and ~~sensors which detect cross traffic at intersections~~ roadway vehicle detectors should be used ~~expanded and modified~~ to reduce traffic congestion on major ~~thoroughfares~~ arterials. At the same time, use of regulatory devices along local streets ~~within residential areas~~ will discourage through traffic when a good signal system is in effect on the major ~~thoroughfares~~ arterials. ~~Diagonal and perpendicular parking should normally not be allowed on major or secondary thoroughfares.~~ Lane striping, curb cuts, parking configurations and service roads or lanes should provide for ~~driveway~~ access in a manner that will not conflict with through traffic flows.

POLICY 2

Promote increased traffic safety, with special attention to hazards that could cause personal injury.

~~As overall traffic levels increase, the number of accidents also tends to rise. Many accidents occur even where speed of travel is relatively slow.~~ Various measures can be taken to reduce accidents, especially those involving serious personal injury. In some cases redesign of the roadway and of intersections to reduce conflicts between vehicles, bicyclists and pedestrians is required; in others all that is necessary is to improve clarity of signs and of routing so that there is less driver uncertainty and hesitation.

CLASSIFICATION OF ELEMENTS

Freeways
Limited access, very high capacity facilities; primary function is to carry intercity traffic; they may, as a result of route location, also serve the secondary function of providing for travel between distant sections in the city.

Major Arterials~~Thoroughfares~~
Cross-town thoroughfares whose primary function is to link districts within the city and to distribute traffic from and to the freeways; these are routes generally of citywide significance; of varying capacity depending on the travel demand for the specific direction and adjacent land uses.

Transit Conflict Streets
Streets with a primary transit function which are not classified as major arterials but experience significant conflicts with automobile traffic.

Congestion Management Plan Network
All state facilities(freeways and arterials) as well as major arterials and transit conflict streets.

Secondary Arterials~~Thoroughfares~~
Primarily intra-district routes of varying capacity serving as collectors for the major thoroughfares; in some cases supplemental to the major arterial~~thoroughfare~~ system.

Recreational Street
A special category of street whose major function is to provide for slow pleasure drives, cyclist and pedestrian use; more highly valued for recreational use than for traffic movement. The order of priority for these streets should be to accommodate: 1) pedestrians, hiking trails or wilderness routes, as appropriate; 2) cyclists; 3) equestrians; 4) automobile scenic driving. This should be slow and consistent with the topography and nature of the area. There should be adequate parking outside of natural areas.

Collector Streets
Relatively low-capacity streets serving local distribution functions primarily in large, low-density areas, connecting to major and secondary arterials~~thoroughfares~~. To be identified in area plans.

Local Streets
All other streets intended for access to abutting residential and other land uses, rather than for through traffic; generally of lowest capacity.

Relationship Between Function and Physical Design
No rigid design standards can be established on the basis of the functional categories established above, although higher capacities will generally be associated with freeways and major arterials~~thoroughfares~~. Capacities must be determined on the basis of the level of traffic demand, the space available for traffic and the nature of the surrounding environment.

DESIGN GUIDELINES FOR STREETS

Major and Secondary Arterials ~~Streets~~
Where residential uses abut on major and secondary arterials~~thoroughfares~~, they should be screened visually and physically wherever possible.

A consistent pattern of trees at regular intervals should be used to identify major streets.

Medians should be landscaped with attention given not to diminish the safety and sightlines of traffic, especially at intersections.

Extensive buffers should be used to separate busy arterials ~~thoroughfares~~ from active pedestrian areas.

Sufficient space should be provided in the right-of-way to allow safe bicycle movement on all city streets.

The brightness (apparent illumination) of street lighting should be greater than on residential streets and the color or hue different from that on residential streets.

Destination information should be concentrated on major streets with signs used to route traffic on the major streets system.

Local Residential Streets
Excessive traffic speeds and volumes should be restricted and discouraged by every means possible.

Where possible, vehicular access directly to and from local streets should be from other than major arterials~~thoroughfares~~, e.g., via a secondary arterial~~thoroughfare~~ or collector street.

When alternate access is possible, residences should not access to major arterials~~thoroughfares~~.

Local streets, other than collectors, should be primarily for access to residences and to serve for emergency vehicles; pedestrian-dominant streets with the maximum feasible amount of street space devoted to environmental amenities desired and needed by the residents.

Residential streets should be well-lighted without being excessively bright.

Sufficient space should be provided in the right-of-way to allow safe bicycle movement on all city streets.

Intersections
Street width, traffic controls, destination and route information and illumination should be maximized at the intersection of two major arterials~~thoroughfares~~.

Two intersecting residential streets should have minimal roadway width, wide sidewalks and no change in illumination from that on the streets themselves.

Intersections of residential streets and major arterials~~thoroughfares~~ that are not transit corridors should be minimized; where they must intersect, cross and left-turn movements should be limited by curb alignments or medians.

GUIDE TO THE VEHICLE CIRCULATION PLAN

NOTE: This section refers to the **Vehicle Circulation Plan** map. Except where indicated no increase in the vehicular capacity of any thoroughfare is intended.

~~**Bay Front Drive**~~
~~A new recreational drive along the northern shore of the Presidio is proposed to connect Marina Boulevard to Lincoln Boulevard.~~

Bernal Heights Boulevard
This boulevard should function as a recreational street, with emphasis on pedestrian and bicycle use and with minimal auto capacity.

Central Freeway
Alternatives to retrofitting or reconstructing the elevated portion north of Mission Street should address and resolve the urban design and environmental problems of the existing viaduct.

Cross-Over Drive
~~This connection in Golden Gate Park between Park Presidio Boulevard and Nineteenth Avenue should be redesigned and realigned as a below grade roadway.~~ There should be no connection with John F. Kennedy Drive. The Drive should be redesigned ~~should be limited~~ to minimize its intrusion in the Park, with a capacity similar to Park-Presidio Boulevard, and should be carefully aligned to avoid tree removal.

Doyle Drive
This road should be improved for greater safety and minimal conflict with the recreational and scenic values of the Presidio; design capacity should be no greater than three lanes in each direction ~~that of the Golden Gate Bridge less vehicles using Park Presidio Boulevard~~.

The Embarcadero
A reconstructed roadway between Mission Bay~~Washington~~ and North Point Streets is proposed as an attractive landscaped roadway having two moving lanes in each direction, an exclusive transit right-of-way, bicycle lanes and separated access and loading areas at piers in maritime use.

~~**Embarcadero Freeway**~~
~~The elevated portion between Howard and Broadway and the Washington-Clay and Broadway ramps should be removed as soon as possible.~~

~~**Franklin Street**~~
~~If and when Van Ness Avenue is depressed for through traffic, the function of this street between Pine and Lombard should be only for local circulation.~~

Frederick Street
If Kezar Drive is reconfigured~~undergrounded~~, this street would no longer be required for truck traffic and should be changed to a local street function.

Geary Boulevard
To the extent possible most east-west travel in the Western Addition and Inner Richmond should be channeled onto this street to divert traffic from nearby residential streets. ~~Grade separations~~Employing TSM measures at key intersections and improved left-turn connections are desirable.

Gough Street
This street should not be widened or made unidirectional north of Pine Street.

Great Highway
The design capacity of this road should be reduced substantially to correspond with its recreational function; emphasis to be on slow pleasure traffic, bicycles and safe pedestrian crossings.

~~**Guerrero Street**~~
~~Although Guerrero, Valencia and Folsom serve as major thoroughfares at the present, the completion of BART to the airport should be accompanied by steps to reduce through traffic and make these streets more compatible with residential uses.~~

Harney Way
~~Widening is~~ Proposed to serve Candlestick Park, Hunter's Point and new freight, commercial and recreational development. Refer to South Bayshore and Hunter's Point Naval Shipyard Conversion Plan.

John F. Kennedy Drive
Through, non-park automobile traffic on this recreational drive should be eliminated.

Kezar Drive
This road should be reconfigured~~undergrounded~~ to restore the corner of the park to full recreational use; design capacity no greater than that of the Fell and Oak couple.

Market Street
This street should be no more than four through traffic lanes between Octavia ~~the Central Skyway~~ and Castro Streets.

Nineteenth Avenue
This heavily trafficked street should ~~ultimately~~ be landscaped~~rebuilt~~ as a parkway with the same capacity~~and similar design as Park Presidio Boulevard~~. Simultaneous measures should be taken to maintain the low levels of ~~eliminate~~ through traffic on parallel streets.

OShaughnessy Boulevard
Functionally, this route must provide for crosstown movements; in design, it should remain a scenic-recreational drive, not intended for heavy traffic.

~~**Parnassus Avenue**~~
~~If the University of California Medical Center wishes to connect its campus on both sides of this street, the University should depress the roadway to maintain a through route for transit and vehicular traffic.~~

~~**Pine Street-Bush Street**~~
~~When the Richmond rapid transit line is built, priority should be given to reducing capacity and landscaping these residential streets west of Van Ness Avenue.~~

~~**State Route 230**~~
~~A surface parkway with two moving lanes in each direction should be constructed along this route, designed to divert truck traffic from Third Street, while serving the major Port facilities, India Basin Redevelopment Area, Hunters Point Shipyard, the new Candlestick Point State Park and Candlestick Park Stadium.~~

~~**State Route 480**~~
~~This State Highway Route should be eliminated from the State Highway Plan, and there should be no freeway or other high vehicular capacity, limited access connection between the Golden Gate Bridge and downtown.~~

Valencia Street
This street should act as a neighborhood collector street as well as a principal bicycle arterial~~soon as possible after BART begins operations on the Peninsula~~.

~~**Van Ness Avenue**~~
~~The possibility of depressing portions or all of Van Ness Avenue from the Central Freeway to Lombard in order to separate through traffic from local circulation should be studied.~~

MASS TRANSIT
(revised text)

OBJECTIVE 1

GIVE FIRST PRIORITY TO IMPROVING TRANSIT SERVICE THROUGHOUT THE CITY, PROVIDING A CONVENIENT AND EFFICIENT SYSTEM AS A ~~FEASIBLE~~ PREFERABLE ALTERNATIVE TO AUTOMOBILE USE.

In order to encourage residents, commuters, and visitors to switch their travel modes away from the automobile, we must improve transit service to make it a preferred alternative to the automobile. Improvements to the existing system can be implemented at a relatively low cost, however, such improvements are often resisted due to real or perceived negative impact on parking or traffic circulation. For this reason, transit improvements should be based on a rational street classification system in which all transportation functions of the street network are analyzed, and only certain streets or locations designated "transit preferential." Transit preferential streets (TPS) should be established along major transit routes, ~~lines should follow transit preferential streets~~, and general traffic should be routed away from these streets wherever possible.

In certain locations pedestrians' needs must also be addressed in transit system improvements. This is important near major activity centers and interline transfer points. For this reason "transit centers" should be established as part of the transit preferential streets (TPS) system where pedestrian safety, accessibility, and circulation needs are addressed, and transit information and minimum passenger amenities are provided.

POLICY 1

Give priority to transit vehicles based on a rational classification system of transit preferential streets.

The TPS classification system should consider the multi-modal functions of the street, the existing and potential levels of transit service and ridership, and the existing transit infrastructure. Through street classification, transit preferential treatments should be concentrated on the most important transit streets, and the treatments applied should respond to all transportation needs of the street. For example, on streets that are major arterials for transit and not for automobile traffic, treatments should emphasize transit priority. On streets that are major arterials for both transit and automobiles, treatments should emphasize a balance between the modes, emphasizing the movement of people and goods rather than vehicles. This method ensures that transit preferential treatments are applied in the most efficient and cost effective manner.

TABLE 1: TRANSIT PREFERENTIAL STREET CLASSIFICATION SYSTEM

FUNCTION	CRITERIA	RECOMMENDATION
Primary Transit Street --Transit Oriented	Not a major arterial, AND, • High transit ridership, OR, • High frequency of service, OR, • Surface rail.	All transit priority treatments may be applied based on established guidelines. The emphasis should be on moving transit vehicles. Impacts on automobile traffic should be of secondary concern.
Primary Transit Street --Transit Important	Major arterial, AND, • High transit ridership, OR, • High frequency of service, OR, • Surface rail.	All treatments should be designed to improve the balance between modes of transportation. The emphasis should be on moving people and goods, rather than on moving vehicles.
Secondary Transit Street	• Medium transit ridership and low-to-medium frequency of service, OR, • Medium frequency of service and low-to-medium transit ridership, OR, • Connects two or more major destinations.	Treatments should be low-cost and geared to solving a specific transit problem.
Transit Center	~~• Provides access to a rail station, OR,~~ ~~• Provides transfers between two or more primary transit streets or between a primary and a secondary transit street, OR,~~ ~~• Provides access to one or more major destinations.~~ Located at: • the intersection of two or more rail transit corridors and/or Primary Transit Streets, OR, • a regional transit terminal, OR, • the intersection of two or more regional transit lines	Treatments should be designed to emphasize pedestrian as well as transit needs. Safety, accessibility, circulation, information, and aesthetics concerns should all be addressed.

MAP 1: TRANSIT PREFERENTIAL STREETS SYSTEM: The map inserted here illustrates the TPS system of streets and transit centers based on Table 1 Classification.

N

TRANSIT PREFERENTIAL STREETS

Scale : 1" = 1.25 miles

LEGEND

Primary Transit Streets

Transit Oriented

Transit Important

Others

Secondary Transit Street

Transit Center

POLICY 2:

Reduce, relocate or prohibit automobile facility features on transit preferential streets, such as driveways and loading docks, to avoid traffic conflicts and automobile congestion.

POLICY 3:

Develop transit preferential treatments according to established guidelines.

Treatment guidelines are important in establishing consistency in treatment type and design, and to ensure that all functions of the streets are considered in treatment design, not just transit. The emphasis is on reducing conflicts between modes wherever possible and on moving people and goods rather than on moving vehicles. ~~For example, the most transit oriented treatments (e.g. bus lanes) are limited to the most transit oriented streets, and on streets that are important to both transit and general traffic, treatments emphasize a balance between transit and general traffic (e.g. bus bulbs, signal pre-emption). Streets with a secondary transit function are targeted for low cost treatments (e.g. bus stop lengthening, consolidation or relocation) which address a specific problem.~~

TPS measures and treatments vary in the effectiveness of enhancing transit operation, and should relate to the function of the street -- Transit Oriented, Transit Important, and Secondary Transit -- on which they are applied. The treatments and measures include:

- Transit exclusive/priority lanes;
- Bus stop reduction programs;
- Stop sign placement/reduction programs;
- Traffic signal phase modifications;
- Traffic signal pre-emptions;
- Sidewalk bus bulbs; and
- Improved traffic law enforcement.

POLICY 3:

Develop transit centers according to established guidelines.

Transit centers have significant potential to improve transit service by improving conditions at major stops and transfer points. Transit centers should address both pedestrian and transit needs and be designed to reinforce the link and interdependence between the surrounding neighborhood and the transit system, enhancing the sense of place for the neighborhood, and improving the visibility of the transit system. Guidelines must be followed to facilitate design consistency and ensure that safety, accessibility, circulation, information, comfort and aesthetic issues are adequately addressed. Transit Center treatments include enlargement of passenger queuing areas by bulbing at bus stops; the provision of passenger needs e.g. shelter, transit information; and by ensuring adequate safety, accessibility, circulation, and aesthetic concerns are addressed.

POLICY 4:

Place and maintain all sidewalk elements, including passenger shelters, benches, trees, newsracks, kiosks, toilets, and utilities at appropriate transit stops according to established guidelines.

Bus shelters and other passenger facilities and amenities are often not placed due to objections from adjacent property owners. Guidelines ensure that all relevant issues are addressed up front in locating sidewalk elements at transit stops.

POLICY 5:

Provide priority enforcement of parking and traffic regulations on all Transit Preferential Streets.

Transit service is substantially improved when enforcement of existing parking and traffic regulations is applied. In times of dwindling resources, enforcement efforts should be maximized by establishing a priority system whereby enforcement is first applied on the primary transit streets. This includes enforcement against meter feeding, illegal parking, double parking, bus zone parking, and illegal use of bus lanes.

POLICY 6:

Encourage ridership and clarify transit routes by means of a city-wide plan for street landscaping, lighting and transit preferential treatments.

Sidewalks along transit routes should be attractive and well-lit to encourage walking to and from transit. Streetscape design elements such as trees and lighting are often placed without regard to the transit lines operating on the street. Many lines use fixed guideways which are as much a part of the streetscape as the trees and lights. Street design which is coordinated with transit routes improves the ability to comprehend the routing of lines and the layout of the transit system.

POLICY 7:

Intensify overall transit service in the "central area."

The "central area" refers to the northeast quadrant of the city. More travel occurs to and within this area than any other; traffic and pollution levels are highest, and the streets are more congested. It is important to give the highest priority to an intensification and enhancement of transit service within this area.

POLICY 8:

Improve inter-district and intra-district transit service.

During non-peak hours, while travel to downtown for shopping and entertainment is still substantial, there is much more travel between and within districts in the city. In a "grid" network of transit services, the potential to improve inter- and intra-district transit travel relies on improving certain important cross-town lines. Transit service on these lines should be frequent, well-coordinated with other transit services and corridors, and as quick and direct as possible.

POLICY 9:

Keep fares low enough to obtain consistently high patronage and encourage more off-peak use.

Transportation is a public service not unlike street lighting, sewage service or fire protection. Nearly all transportation is subsidized to some degree with public funds. It is no more reasonable to expect transit to "pay its way" with the fare box than it is to expect streets to pay their way. To charge directly for transit use, where only indirect taxes are imposed on automobile use, discourages transit use.

POLICY 10:

Promote the electrification of bus operation.
Electric trolley buses are cleaner, quieter and often faster than diesel buses. In planning for the conversion of bus operation, consideration should be given to topography, bus operation in traffic, air quality, noise and visual impacts of the overhead wires.

OBJECTIVE 2

DEVELOP TRANSIT AS THE PRIMARY MODE OF TRAVEL TO AND FROM DOWNTOWN AND ALL MAJOR ACTIVITY CENTERS WITHIN THE REGION.

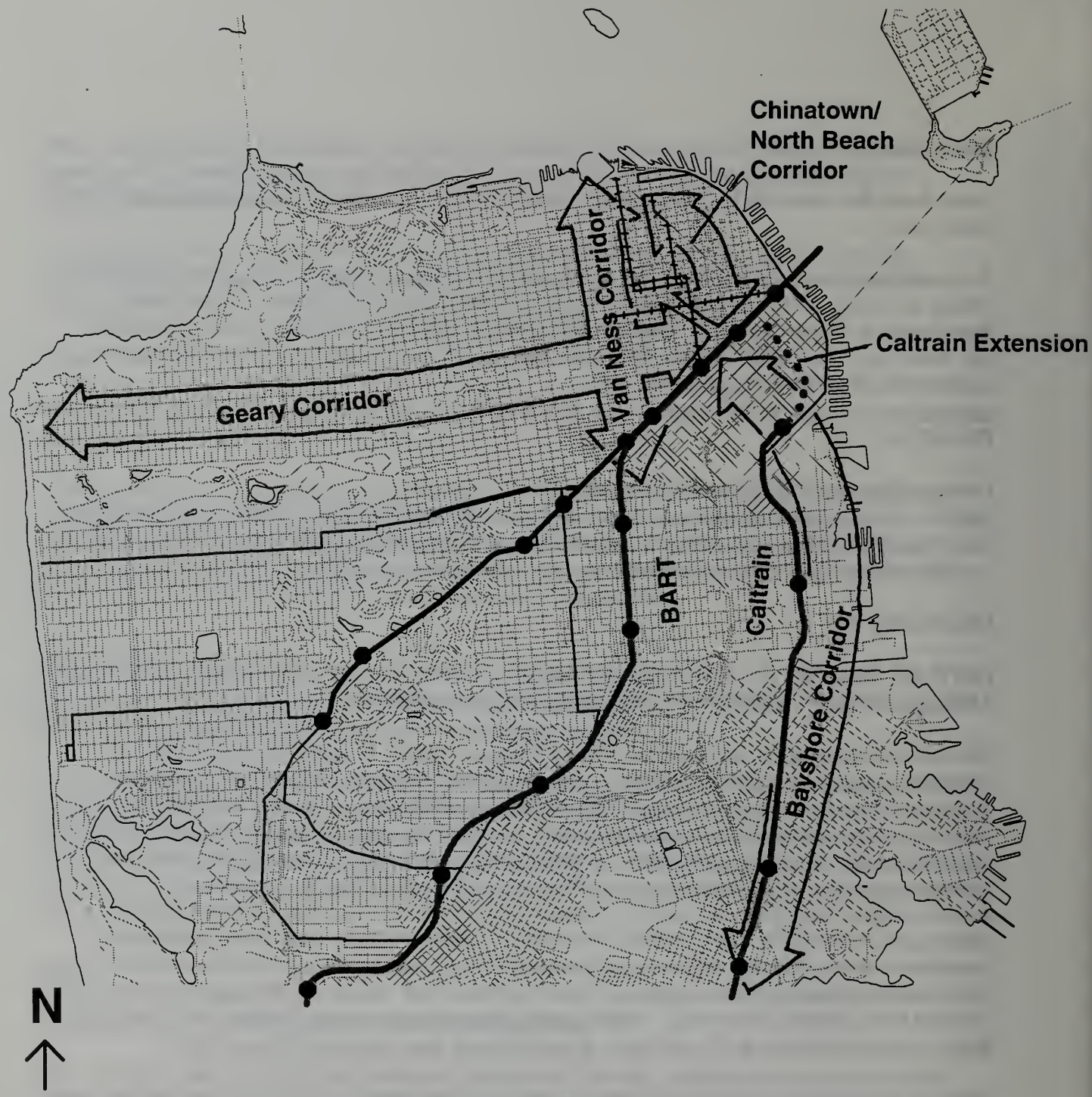
The automobile cannot serve as the primary means of travel to and from downtown. An alternative means of equal convenience and greater efficiency is required, not only to downtown, but also among all major activity centers. While direct service is available from almost all parts of the city to downtown, travel is often slow and vehicles overcrowded during the peak hours. Crowding can never be eliminated completely. However, it is important for continued patronage that transit service, from feeder buses to regional trunklines, accommodate basic ridership comfort in conformance with the service standard ratio of passengers to seats for each operator and type of transit vehicle. ~~and rider comfort that trunklines serving outlying districts provide seats for all passengers and that short-term standees be allotted adequate space.~~ Travel to downtown should be possible in less than 30 minutes from all parts of the city. This can be achieved with express buses, exclusive bus lanes, and construction and expansion of rapid transit lines along major corridors.

The use of transit to travel between the suburbs and downtown and other major centers in the city can only become primary with the development of a good regional transit system connecting downtown to other parts of the region. Existing regional rail lines should be expanded where feasible.

POLICY 1:

Provide transit service from residential areas to major employment centers outside the downtown area.

Reverse commuting to areas other than downtown is expected to increase and place new requirements on the transit system. The city should pursue means of providing this transit for residents where it is not available.



RAIL TRANSIT PLAN

Scale : 1" = 1.25 miles

LEGEND

- BART, Caltrain and Station
- Muni Metro Subway and Station
- Surface Light Rail
- Cable Car
- Future rail/ fixed gudeway transit corridor

POLICY 2:

Where a high level of transit ridership or potential ridership exists along a corridor, existing transit service or technology should be upgraded to attract and accommodate riders.

POLICY 3:

Make future rail transit extensions in the city compatible with existing BART, Caltrain or Muni rail lines.

In order to ensure potential linkages, interchange of vehicles and cost savings, new rail ~~rapid~~ transit lines should be of the same basic type as either the BART, Caltrain or Muni systems, depending on the potential link. Special systems, such as cable cars or other limited service facilities, need not be compatible.

POLICY 4:

Facilitate and continue ferries and other forms of water-based transportation as an alternative mode of ~~travel~~ transit between San Francisco and ~~the north bay~~other communities along the Bay, and between points along the waterfront within San Francisco.

Since the Loma Prieta earthquake, ferry service has resumed between San Francisco and the East Bay. This provides a pleasant and useful alternative to a number of commuters who might otherwise choose to drive, and as such should be promoted as recommended in MTC's Regional Ferry Plan.

POLICY 5:

Establish frequent and convenient transit service, including water-based transit, to major recreational facilities and provide special service for sports, cultural and other heavily attended events.

It is important to promote transit as the primary mode of transportation to sports, cultural and other heavily attended events. The result is increased access to these places for those without cars; and reduced noise, pollution, and congestion when those with cars use transit.

POLICY 6:

Make convenient transfers between transit lines, systems and modes possible by establishing common or closely located terminals for local and regional transit systems and by coordinating fares and schedules.

POLICY 7:

Bridges and freeways should have exclusive transit ~~bus~~ lanes where significant transit service is provided by transit ~~buses~~.

Transit lines can provide more efficient service by operating on their own rights-of-way. These can be instituted on bridges and freeways leading into the city, and interconnect, where feasible, with a system of exclusive ~~bus~~ transit lanes or transit priority street treatments within the city.

POLICY 8:

Improve pedestrian and bicycle access to transit facilities.

Pedestrian access to and from major destinations and the serving transit facility should be direct and uncomplicated. Bicyclists should be accommodated on regional and trunkline transit vehicles, stations and through the provision of storage lockers and/or secured bicycle parking.

~~**POLICY :**~~

~~**Build and maintain rapid transit lines from downtown to all suburban corriders and major centers of activity in San Francisco.**~~

OBJECTIVE 3

DEVELOP AND IMPROVE DEMAND-RESPONSIVE TRANSIT SYSTEMS AS A SUPPLEMENT TO REGULAR TRANSIT SERVICES.

POLICY 1:

Maintain a taxi service adequate to meet the needs of the city and to keep fares reasonable.

Taxis serve as an essential supplement to the transit system, not merely for tourists but for many residents in the city who use taxis for particular trips when regular transit service is inconvenient. Although taxis should continue to be regulated, competition should be encouraged for improved service and low fares. The feasibility of water taxis connecting major attractions along the waterfront should be explored.

POLICY 2:

Consider possibilities for supplementary, privately operated transit services.

There are areas of the city where private operators might find it profitable to provide transit service for inter-district and intra-district travel, and they should be encouraged to do so.

POLICY 3:

Guarantee complete and comprehensive transit service and facilities that ~~is~~ are accessible to all riders, including those with mobility impairments.

PEDESTRIAN
(revised text)

The close-knit urban fabric of San Francisco, combined with the dramatic hills and sweeping vistas, makes walking an ideal mode for exploring and moving about the city. In a dense city such as San Francisco, the sidewalk is a vital source of open space, a refuge for sun and air. It is the space that everyone shares, the place in which the entire spectrum of urban life is encountered and experienced, for better or for worse. Since everyone is a pedestrian at one point or another, the sidewalk provides a strong sense of the overall image of the city.

Over much of the twentieth century, the priority given to traffic concerns has contributed to the significant degradation of the pedestrian environment. Freeways were built, streets were widened, and pedestrian crossings were eliminated. Peak-hour tow away traffic lanes were established on busy pedestrian streets, creating a hazardous situation where automobiles speed past within a few feet of overcrowded sidewalks.

The purpose of this section is to address pedestrian issues and to provide direction and policy that ensures pedestrian movement in the city is safe, convenient and pleasant, in recognition that pedestrian travel is an important component of the transportation system, especially in this transit-oriented city.

OBJECTIVE 1

IMPROVE THE CITY'S PEDESTRIAN CIRCULATION SYSTEM TO PROVIDE FOR EFFICIENT, PLEASANT, AND SAFE MOVEMENT.

POLICY 1

Provide sufficient pedestrian movement space with a minimum of pedestrian congestion in accordance with a pedestrian street classification system.

POLICY 2

Widen sidewalks where intensive commercial, recreational, or institutional activity is present and where residential densities are high.
Wider sidewalks provide more pedestrian space and also permit more pedestrian amenities. In high-density residential and recreational areas, sidewalks are often utilized as open space, and should be designed and built to accommodate such a use. A good example of this type of sidewalk construction is in Duboce Triangle.

POLICY 3

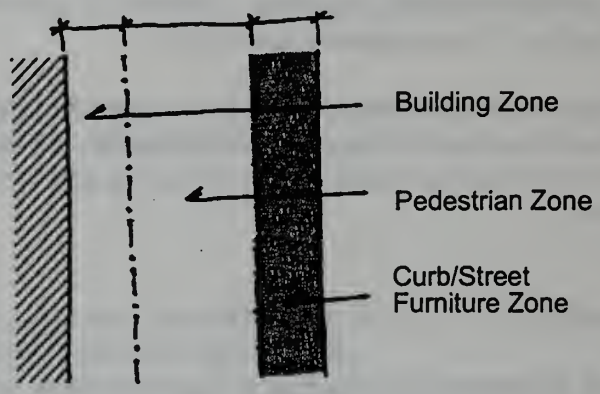
Maintain a strong presumption against reducing sidewalk widths or eliminating crosswalks to accommodate automobile traffic.

POLICY 4

Tow-away lane approvals should consider existing and potential pedestrian usage and level of service on abutting sidewalks, including the desirability of future sidewalk widening, as well as the needs of transit operation on the street.

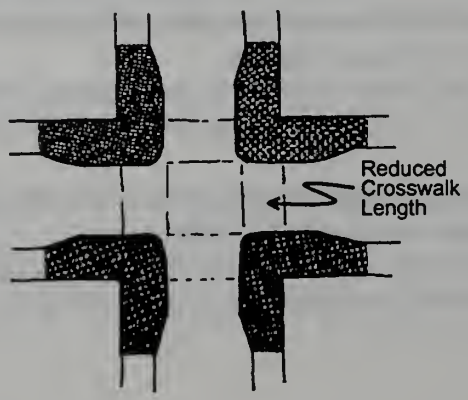
POLICY 5

Minimize obstructions to through pedestrian movement on sidewalks by maintaining an unobstructed width that allows for passage of people, strollers and wheelchairs.

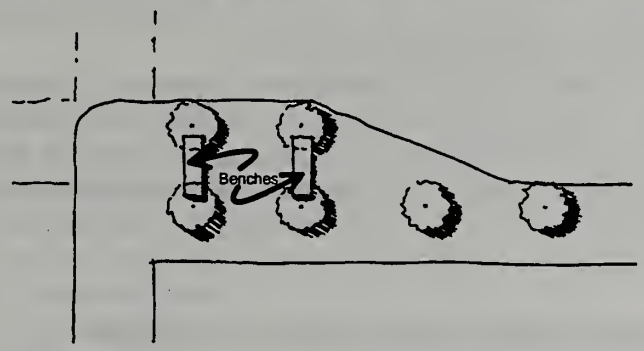


POLICY 6

Ensure convenient and safe pedestrian crossings.
Appropriate treatments may include widening sidewalks at corners to provide more pedestrian queuing space and shorter crosswalk distances, especially where streets are wide. Traffic signals should provide enough "green" time so that pedestrians can cross streets safely, and where traffic volumes are high and/or streets are unusually wide, large pedestrian islands should be installed to provide pedestrians with a safe waiting area while crossing. Consideration should be given to the efficient operation of transit service in sidewalk widenings.



Corner bulbs reduce the crossing distance and provide more corner queuing space. The reduced crossing distance makes crossing safer, while the increased queuing area reduces the corner overcrowding that often spills into the street. Care should be taken not to constrain the movement of bicycles and transit vehicles in the design of sidewalk bulbs.



Policy 7

Support pedestrian needs by incorporating them into regular short-range and long-range planning activities for all city and regional agencies and include pedestrian facility funding in all appropriate funding requests.

Pedestrian issues are affected by decisions in a variety of agencies and need to be considered. A number of local and regional agencies and departments plan transportation projects, which are increasingly developed as multi-modal projects, could incorporate pedestrian improvements. In particular, local and regional mass transit projects must pay particular attention to pedestrian needs, especially at significant transfer points. For many transportation projects, pedestrian improvements could be included with the project for far less than if the pedestrian project was a stand alone project. In general, the larger the project, the more potential to address pedestrian needs.

Policy 8

Implement the provisions of the Americans with Disabilities Act and the city's curb ramp program to improve pedestrian access for all people.

Consideration of special pedestrian and wheelchair access should be given to areas and crosswalks where there is a large concentration of elderly and disabled persons.

OBJECTIVE 2

IMPROVE THE AMBIENCE OF THE PEDESTRIAN ENVIRONMENT.

POLICY 1

Preserve existing historic features such as streetlights and encourage the incorporation of such historic elements in all future streetscape projects.

Historic streetlight removal is an on-going problem in the city as the responsible departments argue that historic streetlights are not worth the expense. Given San Francisco's historic architectural heritage, we should be protecting more historic elements not removing them.

POLICY 2

Maintain and expand the planting of street trees.
Street trees are one of the most important elements in creating a liveable streetscape. They provide shade, create a human scale on the street, soften the edge between the building and the street, and serve as a buffer between pedestrian space and the street. Moreover, street trees are an important environmental consideration as they contribute to cleaner air.

POLICY 3

Install pedestrian-serving street furniture where appropriate.

POLICY 4

Preserve pedestrian-oriented building frontages.
Building frontages that invite people to enter, that provide architectural interest and a sense of scale, and that are transparent enough to provide visual connections to and from the sidewalk help make the pedestrian environment more agreeable and safe.

OBJECTIVE 3

DEVELOP A CITYWIDE PEDESTRIAN NETWORK.

POLICY 1

Create a citywide pedestrian street classification system.

Similar in scope to the classification systems developed for pedestrians downtown and for automobiles citywide, the system permits directed planning for pedestrian improvements and the designation of pedestrian routes between significant destinations.

The classification system also addresses auto-oriented conditions that conflict with pedestrian travel on pedestrian-priority streets.

POLICY 2

Utilizing the pedestrian street classification system, develop a citywide pedestrian network that includes streets devoted to or primarily oriented to pedestrian use.

This network is composed of existing routes such as the Bay and Ridge trails, stairways, exclusive pedestrian streets, and pedestrian-oriented vehicular streets. The network links important destinations, neighborhood commercial districts, and open spaces.

POLICY 3

Develop design guidelines for pedestrian improvements in Neighborhood Commercial Districts, Residential Districts, and other pedestrian-oriented areas as indicated by the pedestrian street classification plan.

The design guidelines ensure identifiable, pedestrian-oriented treatments for important pedestrian streets and set minimum standards for the placement of pedestrian streetscape elements.

Pedestrian Classification System

There are three types of pedestrian streets: Exclusive Pedestrian, Pedestrian-oriented Vehicular, Vehicular Thoroughfare that are manifested in a variety of conditions as outlined below.

Exclusive Pedestrian Street: Street on which vehicles are not permitted (except for transit vehicles).

Pedestrian-oriented Vehicular Street: Street with vehicular traffic that has significant pedestrian importance. Generally a transit street.

Vehicular Street: A Major Arterial or freeway as identified in the Master Plan. Generally has minor pedestrian importance.

Citywide Pedestrian Network Street

Definition: An inter-neighborhood connection with "citywide significance" includes both exclusive pedestrian and pedestrian-oriented vehicular streets, e.g. Market, California, Van Ness, 24th.

- On a large scale, the Citywide Pedestrian Network connects much of the northern part of the city.
- Includes the Bay, Ridge, and Coast trails (part of a regional system).
- Includes stairways and other exclusive pedestrian walkways.
- Used by commuters, tourists, general public, and recreaters.
- Enhances walking as a primary means of commuting.
- Connects major institutions with transit facilities.

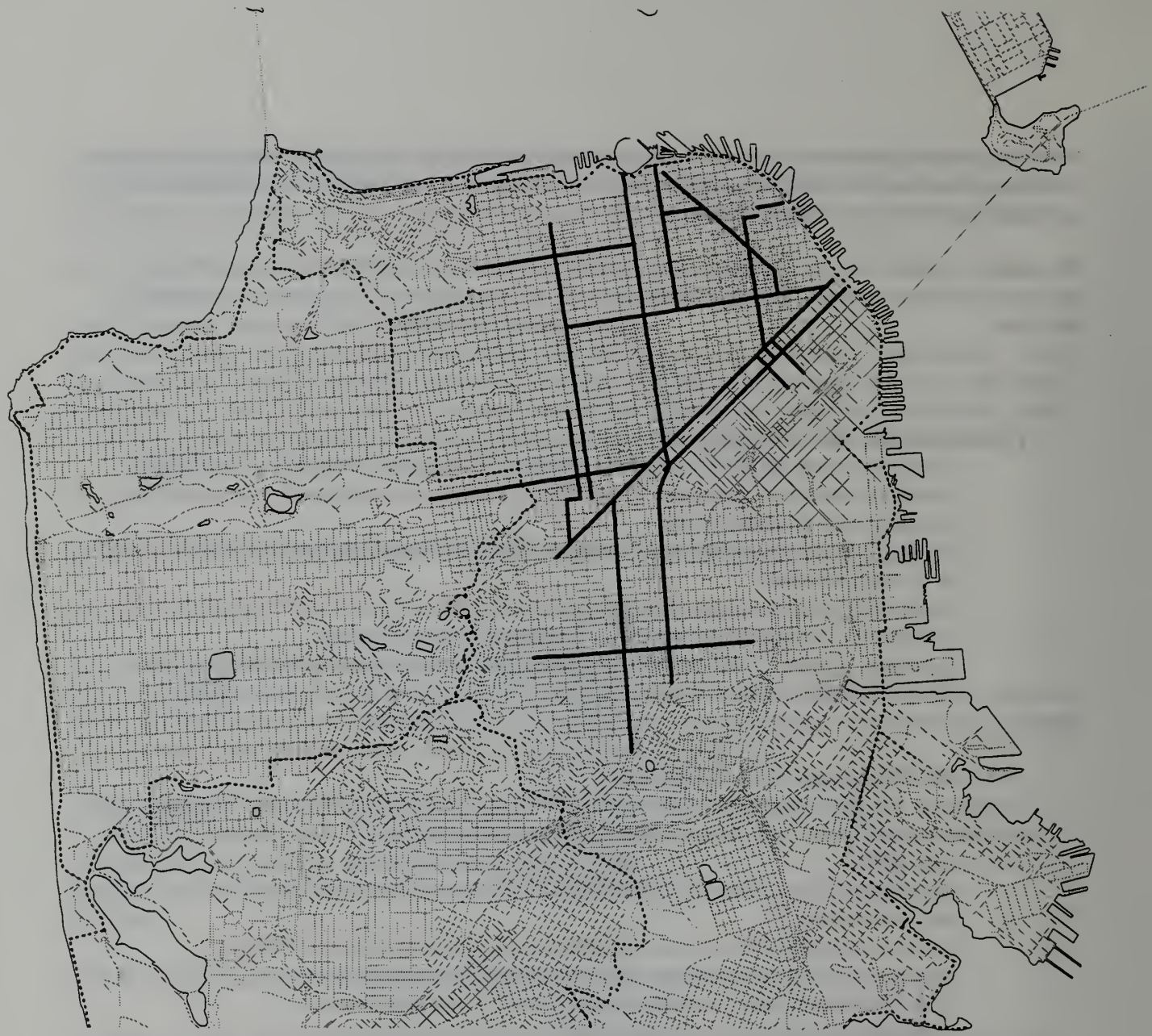
--Design Goals

- Visible marker/connection throughout to tie network together.
- Pedestrian movement is a priority and should not be compromised.
- Minimize conflicts with other modes.
- Priority street for pedestrian improvements (safety, access, aesthetics, and circulation)
- Pedestrian scale and orientation for street improvements and building frontages.

Neighborhood Network Street (intra-neighborhood connection)

Definition: A neighborhood commercial, residential, or transit street that serves pedestrians from the general vicinity. Some Neighborhood Network Streets may be part of the citywide network, but they are generally oriented towards neighborhood serving uses. Types include exclusive pedestrian and pedestrian-oriented vehicular streets.

--Neighborhood Commercial Street.



N

CITYWIDE PEDESTRIAN NETWORK

Scale : 1" = 1.25 miles

LEGEND

————————	Citywide Pedestrian Network Street
.....	Bay, Ridge and Coast Trail

Definition: A street in a Neighborhood Commercial District as identified in the Master Plan. Predominately commercial use with parking and loading conflicts. e.g. Clement, Castro, West Portal.

--Design Goals.

- •Maintain at least 4 feet width for pedestrian passage.
- •Encourage pedestrian-oriented uses.
- •Priority street for pedestrian improvements (safety, access, aesthetics, and circulation).
- •Maintain a buffer (trees, parking, etc.) between pedestrian and vehicular circulation.
- •Minimum crosswalk requirements.
- •Turning movement restrictions in areas with high pedestrian volumes.
- •Restrictions on curb cuts/auto entrances.
- •Coordinated pedestrian improvements to reflect neighborhood character.

--Transit Street.

Definition: A Primary Transit Preferential Street as identified in the Master Plan. e.g. Divisadero, Masonic.

--Design Goals.

- •Enhanced pedestrian/transit connections including bus bulbs, better stop markings, and transit system/neighborhood information.
- •Maximum distance between crosswalks and transit stops.
- •Minimum transit stop treatments including benches, shelters, and information.

--Residential Street.

Definition: A street within a R zoned district.

--Design Goals.

- •Every street has trees, where sidewalk widths allow.
- •Maintain a buffer (trees, parking, etc.) between pedestrian and vehicular circulation. The extent of buffering is related to the magnitude of vehicular traffic.
- •"Capture the street for open space." On streets with sufficient width and without significant vehicular traffic. (i.e. Duboce Triangle style improvements)

--Neighborhood Network Connection Street.

--*Definition:* An intra-neighborhood connection street that connects neighborhood destinations. e.g. 18th, Vulcan Steps.

--Design Goals.

- •Crosswalks and signals should enhance the pedestrian path of travel.
- •Maintain a width of 4 feet for pedestrian passage.
- •Pedestrian scale and orientation for street improvements and buildings.

N

NEIGHBORHOOD PEDESTRIAN STREETS

Scale : 1" = 1.25 miles

LEGEND

Neighborhood Commercial Street

Neighborhood Network Connection Street

•Maintain a buffer (trees, parking, etc.) between pedestrian and vehicular circulation.
•Minimize/discourage large volume vehicular traffic ingress and egress.
•Priority street for pedestrian improvements (safety, access, aesthetics, and circulation).

OBJECTIVE 4

CONSIDER THE SIDEWALK AREA AS AN IMPORTANT ELEMENT IN THE CITYWIDE OPEN SPACE SYSTEM.

POLICY 1

Retain streets and alleys not required for traffic, or portions thereof, for through pedestrian circulation and open space use.

POLICY 2

Partially or wholly close certain streets not required as traffic carriers for pedestrian use or open space.

POLICY 3

Encourage pedestrian serving uses on the sidewalk.

POLICY 4

Encourage and support the development of walking tours incorporating signage wherever possible.

There are a number of organized and semi-organized walking tours in the City supported by both private and public entities. Coordination and recognition of these walking tours should be encouraged and, utilizing an idea popular in other cities, signage or markers along prominent walking routes should be considered.

~~**OBJECTIVE 7**~~
~~**PROVIDE SAFE AND PLEASANT SPACE FOR PEDESTRIANS.**~~
~~Walking is a form of transportation which must be provided for, especially in neighborhoods for short trips to local commercial and public facilities and in business areas where many shoppers congregate. Sidewalks, malls and similar spaces provide not only for pedestrian movement but also for children's play, socializing among residents, window shopping, and sitting and watching. Congestion occurs on sidewalks in high activity areas, just as it does on streets. Inadequacy of space creates inconveniences for those trying to pass through and those stopping to talk or look or rest.~~

~~**POLICY 1**~~

~~**Widen sidewalks where intensive commercial, recreational, or institutional activity is present and where residential densities are high.**~~

~~In many high activity areas of the city such as downtown, Fisherman's Wharf and North Beach, sidewalks are narrower than required for pedestrians. Where pedestrian traffic is high and through vehicular traffic is light or can be moved to alternate routes or reduced by transit improvements, some street space can be made into wider sidewalks, landscaped strips and sitting areas. Through traffic should be discouraged or eliminated to avoid conflicts which inconvenience drivers and pedestrians and may increase accidents. In high-density residential areas with little open space, wider sidewalks and small plazas should be created to provide more usable space as well as to discourage through traffic.~~

~~POLICY 2~~

~~Retain streets not required for traffic for pedestrian circulation, open space use, and density controls.~~

~~Proposals for street vacation often arise when a street no longer serves a necessary traffic function. Except in rare cases, street vacations for private ownership or use or for construction of public buildings should not occur where the street could serve as a valuable open space, would improve pedestrian circulation, or maintain control of development density consistent with assumptions underlying land use plans.~~

~~POLICY 3~~

~~Ensure convenient and safe pedestrian crossings.~~

~~Where streets are designed for high volumes or relatively fast movement of vehicles, adequate provision must be made for safe and convenient pedestrian crossings. This is especially important near schools, parks and hospitals, and in high density residential areas. Wide streets should have adequately timed lights and median strips or islands at intersections to allow safe crossings. If grade separation of pedestrian and vehicular movement is necessary, the roadway should be depressed to maintain continuity of pedestrian paths wherever possible. If a change in pedestrian levels is required, ramps are preferable to stairs.~~

~~POLICY 4~~

~~Partially or wholly close certain streets not required as traffic carriers for pedestrian use or open space.~~

~~Some streets in active shopping areas and in residential areas can be closed wholly or partially to vehicular traffic because the streets are not required for vehicular use, except possibly at infrequent intervals or during emergencies. Partial closings can be achieved by substantially narrowing the roadway or by installing temporary barriers during certain periods of the day. Doing so would open up the street for non-traffic uses, without its loss for emergency use or access to homes and businesses. In neighborhood shopping areas provision should be made concurrently for replacement of on-street parking spaces with off-street facilities.~~

BICYCLES
(revised text)

The bicycle is a desirable alternative to the automobile as a means of urban transportation in San Francisco. It can successfully be used for most transportation needs, including commuting, shopping, errands, and recreation. Active encouragement of bicycle use as an alternative to automobile use, whenever possible, is essential in light of the continually increasing traffic congestion caused by motorized vehicles which aggravates air pollution, increases noise levels and consumes valuable urban space. The bicycle is a practical and economical transportation alternative which produces no emissions or noise. In addition, each bicycle user enjoys health benefits through increased physical activity.

To enable a large number of San Franciscans to use the bicycle as a transportation option, several significant needs must be met. The needs include, among others, safe space on the roadway for bicyclists, a system of identifiable bicycle routes that will direct bicyclists to major destinations, safe and secure bicycle parking, and education of both the bicyclists and motorists about the safe sharing of the roadways.

OBJECTIVE 1

ENSURE THAT BICYCLES CAN BE USED SAFELY AND CONVENIENTLY AS A PRIMARY MEANS OF TRANSPORTATION, AS WELL AS FOR RECREATIONAL PURPOSES.

~~**POLICY 1**~~

~~**Increase the availability of information for commute cycling.**~~

~~**Bicycle commuting to the city's central business district is a small but increasing share of all work-bound trips. With some additional support facilities and encouragement, the volume of such bicycle trips could dramatically increase. Bicycle commute routes are by preference often the same commute routes used for major vehicular access to the downtown. In some cases, the routes also coincide with designated Transit Preferential Streets. The commuting cyclist is generally an adult rider and a repeat user of the same streets. He or she is therefore likely to operate more safely on heavily trafficked streets than the younger or less experienced rider.**~~

~~**A number of improvements can be made to increase safety for commuting cyclists on these streets without directing less experienced cyclists to venture onto them. Funding should be made available to maintain the surfaces of the preferred commute streets at a relatively high standard. The commute streets should not include marking or signing that would encourage use by the inexperienced, primarily recreational cyclist unless these streets also lend themselves to recreational bicycle use. Direct information to commuting cyclists should be primarily in the form of maps. Distribution of such maps should be one aspect of transportation brokering services provided by large employers.**~~

POLICY 1

Expand and improve access for bicycles on city streets and develop a well-marked, comprehensive system of bike~~ways~~ routes in San Francisco.

It is essential that the city have a system ~~series~~ of bike~~ways~~ routes which provide safe and reliable through travel to all areas of the city. These bike~~ways~~ routes will necessarily be mostly on city streets, will provide space for the bicyclist, and may or may not have bicycle lanes or other markings which separate the bicyclist's space from the automobile driver's space. The space for bicycles should be clearly identified, with signange, for motorists, bicyclists and pedestrians, and should conform to the more rigorous standards of the most recent Highway Design Manual and ~~consistent with sound design standards such as~~ the American Association of State Highway and Transportation Officials (AASHTO) in its "Guide for Development of ~~New~~ Bicycle Facilities," which has been adopted by the Federal Highway Administration as its design standard. Use of the AASHTO guide will provide maximum opportunity to qualify for state and federal funding and will assist in avoiding city liability based upon design. Advisory and permissive guidelines should be observed whenever possible.

The bike~~way~~ route system should provide efficient access from all neighborhoods to the many popular business, educational, cultural, entertainment, and educational destinations in the city, and between those destinations. Special attention should be paid to commuters to the downtown areas, and connections to regional bicycle routes. ~~Such a series of bicycle routes as a start for this bikeway system is a part of this master plan following these general policy statements.~~ Nevertheless, bicycle access must be provided, and enhanced if necessary, whether or not the streets are designated as "bike routes," to enable all residents and visitors to use bicycles as a viable means of transportation.

Where possible, opportunities should be taken to develop auto-free bicycle~~transportation~~ corridors, such as ~~contra-flow lanes,~~ veloways (bicycle-only facilities), bicycle boulevards ~~rails-to-trails conversions~~ and any other innovative solutions to improve bicycle transportation space within the city.

POLICY 2

Develop a rational classification system of bicycle preferential streets.

The bicycle preferential streets system should consider the multi-modal functions of the street, the topography, and the existing and potential volume of bicycle traffic on the street. Streets and pathways in the bike route system that are relatively level, do not have conflicts with high volumes of pedestrian traffic, and/or the primary functions of freight routes, major arterials and primary transit streets should be designed and treated to prioritize the movement of bicycles. Other streets and paths on the bike route system should be designed and treated to balance the other modes of transportation with the movement of bicycles.

~~**POLICY 3**~~
~~**Designate appropriate staff to coordinate all bicycle related activities.**~~
~~A successful bicycle program requires cooperation among a variety of city departments, including the Departments of City Planning, Parking and Traffic, Public Works, the Chief Administrator's~~

N
↑

BICYCLE ROUTE MAP

Scale : 1" = 1.25 miles

LEGEND

_____ Citywide Bicycle Route

~~Office, the Public Utilities Commission, and the Transportation Authority, as well as various State and other government agencies. Appropriate staff should be designated to be responsible for the coordination of bicycle related activities to ensure that projects and plans that involve many departments are carried out effectively.~~

POLICY 3

Eliminate hazards to bicyclists on city streetsdesignated bicycle routes.

City departments should give particular attention to eliminating hazards on bicycle routes. Hazards which may be inconsequential to automobiles can be disruptive, disabling, or even life threatening to bicyclists. Design hazards such as sewer grates parallel to travel, unpaved or poorly paved shoulders, rough and/or obsolete railroad tracks, and ~~conventional~~ speed bumps all pose dangerous conditions for cyclists and should be eliminated from bicycle routes. Intermittent hazards such as bad road surfaces, cracks and pot holes, and refuse such as broken glass should be eliminated promptly. The city should give increased attention and more frequent cleaning to bicycle route streets because of the increased needs of cyclists for a hazard-free road surface. Bicycle routes should be well lit.

POLICY 4

Make available bicycle route and commuter information and encourage increased use of bicycle transportation.

San Francisco's healthful climate and compactness make travel by bicycle practical, but cyclists need to know the most efficient ways to traverse the city's many hills. Optimum routes exist to cross all areas of the city by bicycle, but these routes must be identified to the public. The city should provide route maps to enable potential bicycle commuters and others using the bicycle for transportation to find the most efficient routes to their destinations. Such maps should also identify recreational bicycle routes, including the San Francisco portions of the Ridge Trail and the Bay Trail.

Where appropriate, identifying bikeways will include a clear, efficient system of bicycle route signs. Destination directions should be indicated with each sign.

POLICY 5

Accommodate bicycles on regional transit facilities and important regional transportation links.

The ability to integrate bicycle use and regional transportation systems is essential to maximizing the bicycle's transportation utility. The Bay Area is fortunate to have a number of quality public transportation services. The expansion~~inclusion~~ of bicycle access on each of these systems increases the bicycle's range and usefulness and further decreases the number of auto trips made in the Bay Area.

Every effort must be made to maximize bicycle access on BART, CalTrain, all ferry systems, and on AC Transit, SamTrans and Golden Gate Transit buses and on selected Municipal Railway routes. Further, CalTrans shuttle service across the Bay Bridge should be expanded so it is available at all hours. Twenty-four hour access to all Bay Area bridges is essential to maintain these vital links within the bicycle transportation system.

POLICY 6

Include bicycle facility funding in all appropriate requests.

Bicycle transportation funding should be integrated into all appropriate state and federally funded transportation projects, especially those related to safety, transportation, recreation, and mass transit. Funds earmarked specifically for bicycle facilities should be pursued, based on an identified list of priority projects. Transportation planning should be integrated to include consideration of present and potential bikeways in all analyses.

POLICY 7

Prevent bicycle accidents though bicycle safety education and improved traffic law enforcement.

Education of bicyclists and appropriate training should be made available at a wide variety of sources. These may include education of employees at work sites as part of alternative transportation education, to students at schools and colleges, and to new riders through bicycle shops and dealers.

Education of motorists, bicyclists and the public should be actively and vigorously pursued. Such avenues may include billboards and public service messages, motor vehicle licensing procedures, traffic schools, and driver education and driver training courses. The cyclist's equal right to the road, as well as the responsibilities in using this access, should be emphasized.

Traffic enforcement should extend to protection of bicyclists' rights-of-way which are often violated by motorists. Special emphasis also needs to be placed upon theft prevention and investigation. Special training for police officers concerning bicycle-related laws and concerns should be included in their academy and in-service training.

POLICY 8

Identify and expand recreational bicycling opportunities.

Although many of the commuter routes will also serve recreational cyclists, such as those accessing tourist attractions and natural and scenic areas, other routes should be designed to accommodate recreational cyclists. Special attention should be paid to identify and map popular recreational destinations which may not be on regular through commuter routes, such as around

Lake Merced, routes to the zoo, or parts of the Bay Trail and the Ridge Trail. Such routes should also be designated on the bicycle route map developed for San Francisco.

POLICY 9

Accommodate bicycles in the design and selection of all traffic control facilities.

As the application of new technology to traffic control increases, traffic engineers more frequently are using automatic sensing devices to detect, count and monitor traffic and to control traffic signals, signal timing, and other traffic control devices. ~~All~~ The technology of such sensing devices should be improved~~shall be designed~~ to detect and respond to the presence of bicycles as they use the roadway.

OBJECTIVE 2

PROVIDE SECURE AND CONVENIENT PARKING FACILITIES FOR BICYCLES.

Theft and vandalism of locked bicycles is a major problem in San Francisco. This ever-increasing threat is a significant deterrent to increased bicycle use. Cyclists will use their bicycles more frequently, and for more different types of trips, if they have a secure and reasonably convenient parking facility at their destination. Adequate parking is crucial to the increased and continued use of bicycles.

POLICY 1

Provide secure bicycle parking in new governmental, commercial, and residential developments.

Bicycle parking should be provided in all new public and private buildings where automobile parking is required. The Planning Code establishes a requirement for bicycle parking facilities based upon the number of automobile parking facilities in new developments. Additional facilities, such as showers and storage lockers, should be provided as well. The requirement should reflect demand in areas of high potential bicycle use such as shopping facilities, recreational facilities; educational locations and employment sites. These requirements should also be maintained even when developers receive variances from existing parking requirements. These requirements should also be applied to applications for modifications of existing facilities, as well as to new construction.

POLICY 2

Provide secure bicycle parking at existing city buildings and facilities and encourage it in existing commercial and residential buildings.

The city should encourage the owners of existing commercial and residential buildings to provide safe and secure bicycle parking, and encourage such building owners to provide storage lockers and shower facilities where feasible.

Managers of city buildings and other city facilities should endeavor to provide safe and convenient bicycle parking facilities at these locations. Storage lockers and shower facilities should be provided where feasible.

POLICY 3

Provide parking facilities which are safe, secure, and convenient.

Bicycle parking facilities must provide reliable security, adequate bicycle support, safety, and must be conveniently located, preferably where bicycles are sheltered from the weather and visible to attendants and security guards. If these resources are present, bicyclists will use such bicycle parking in increasing numbers. Proper bicycle parking design is critical to its usefulness and effectiveness.

Bicycle parking must be of a design to support the bicycle without damage and permit at least the frame and one wheel to be locked with a U-lock. Bicycle parking facilities must be placed conveniently close to the building and must provide sufficient space for access. They must be physically separated from automobile areas.

POLICY 4

Provide bicycle parking at all transit terminals.

Enabling bicycle access to transit connections encourages transit use and further decreases automobile use. In order for cyclists to consider using bicycle transportation to go to and from bus terminals, BART stations, train stations, ferry terminals, and park-and-ride lots, such locations must provide safe and secure bicycle parking. Such parking should be ample and should be of a high security type.

OBJECTIVE 3

City Government should play a leadership role in increasing bicycle use.

City government should play a leadership role in enabling more people to use the bicycle as their primary means of transportation. The city should provide the facilities, programs and regulatory structure to enable such use, and should encourage the use of bicycles for work trips as an alternative to city cars.

POLICY 1

Consider the needs of bicycling and the improvement of bicycle accommodations in all city decisions and improve accommodation as much as possible.

Genuine recognition and active accommodation of bicyclists' needs by all city departments in decisions related to transportation and land use is essential to the development of a significant

bicycle transportation presence in San Francisco. Often, minor and inexpensive adjustments at a project's design phase can provide considerable benefits to bicyclists. Furthermore, inclusion of accommodations for cyclists when a project is designed can avoid expensive retrofitting later.

POLICY 2

Integrate bicycle planning into regular short-range and long-range planning activities for all city departments.

Every effort should be made to ensure that bicycle transportation is given thorough consideration in all planning activities. Full integration of bicycle transportation requires evaluation of the range of impacts which any transportation or development proposal may have upon bicycle use and bicyclists' safety. This applies not only to city departments but also to the various other entities whose activities affect mobility in San Francisco. Insofar as is possible, city departments should endeavor to develop an effective network of bicycle facilities and policies.

POLICY 3

Designate appropriate staff to coordinate all bicycle related activities.

A successful bicycle program requires cooperation among a variety of city departments, including the Departments of City Planning, Parking and Traffic, Public Works, the Chief Administrator's Office, the Transportation Department, and the Transportation Authority, as well as various State and other government agencies. Appropriate staff should be designated to be responsible for the coordination of bicycle-related activities to ensure that projects and plans that involve many departments are carried out effectively.

POLICY 4

Encourage non-cyclists to become cyclists and encourage cyclists to ride more often.

The city should create opportunities for new cyclists to have a positive bicycling experience, provide incentives for bicycle users, and promote public awareness and acceptance of bicycle transportation and recreational cycling. The city should establish programs to encourage bicycling by city employees including, where practical, for work-related travel, urge private employers to encourage and accommodate bicycle commuting (by providing, for example, incentives and parking, showers, and lockers), and encourage bicycle tourism through existing tourism promotion channels.

~~**Policy 5**~~
~~**Utilize available bicycle facility funding for projects in San Francisco.**~~
~~Bicycle transportation funding should be integrated into all appropriate state and federally funded transportation projects, especially those related to safety and mass transit. Funds earmarked specifically for bicycle facilities should be sought out against an identified list of priority projects.~~

CITYWIDE PARKING

(Revised text)

OBJECTIVE 1

ENSURE THAT THE PROVISION OF NEW OR ENLARGED PARKING FACILITIES DOES NOT ADVERSELY AFFECT THE LIVABILITY AND DESIRABILITY OF THE CITY AND ITS VARIOUS NEIGHBORHOODS.

~~The general theme prevalent throughout the Master Plan and its objectives and policies is that new development must recognize the positive attributes of the city and contribute to their preservation and enhancement and to the overall living environment. New parking facilities should meet these principles because of the impact of a facility upon its immediate physical surroundings and the cumulative traffic generating impacts on the entire city.~~

POLICY 1

Assure that new or enlarged parking facilities meet need, locational and design criteria.

A proposed parking facility should be evaluated as carefully as other proposed additions to the transportation system. Proposed new or enlarged facilities should be reviewed according to Comprehensive Plan policies, and Planning Code criteria for parking facilities. ~~For various special districts and/or where major conflicts occur,~~ The facility should not be developed unless the following criteria are met:

- There is a demonstrated demand for additional parking space in the surrounding area (in the case of parking facilities open to the public) or resulting from a specific development.
- All or part of this demand cannot reasonably be diverted to or served by existing transit service or transit which could reasonably be provided in the near future.
- This demand cannot be met by existing available facilities or more efficient use of existing facilities.
- In the case of desired accessory parking (i.e. parking customarily provided incidental to a permitted use and directly related to the activities conducted on the site of the use) its need is clearly established and not presumed.
- Provision of the facility does not result in the demolition of sound residential, commercial, and industrial buildings.
- The traffic generated by the facility will not create a substantial adverse effect on the surrounding city streets (especially residential streets) and corridors leading into the city.
- The facility, viewed in a citywide context of parking supplied and trips generated, will not discourage the possible diversion of current automobile users to transit.
- The location is appropriate in terms of adjacent land uses.

- The proposed site and facility are readily accessible from freeway ramps or major ~~thoroughfares~~ arterials.

- Conflict between pedestrian and bicycle movements and driveways or ramps is minimized and additional auto traffic through areas of heavy pedestrian concentration is avoided.

- There is not substantial conflict with existing or future patterns of other forms of transportation, especially transit, and access avoids use of transit preferential streets.

- Consideration has been given to the inclusion of other uses in order to maximize use of scarce land resources and integrate the structure into the surrounding neighborhood.

- Access or egress is not primarily from streets or alleys having predominantly residential use.

- The structure is in scale with existing structures in the area, and when located in commercial districts includes commercial frontage in order to avoid blank street level facades.

- The design and operating policy of the facility is such that vehicles can be admitted rapidly, to avoid the use of the street as a waiting area for entrance into the facility and to avoid the situation of automobiles idling for a long period of time.

- ~~Provision has been made where appropriate for parking of vehicles driven by or operated for the physically handicapped.~~

- A portion of spaces is reserved for compact automobiles and motorcycles.

- Adequate provisions are made to accommodate parking and egress for people with mobility impairments.

- Secure, convenient bicycle parking is provided.

- All or portions of the facility are convertible to other uses if demand for parking is reduced in the future.

- An equity program of providing transit fare validations or "cash-out" for patrons and employees who do not use auto parking facilities is offered at establishments where private auto parking is validated or subsidized.

POLICY 2

Discourage the proliferation of surface parking as an interim land use, particularly where sound residential, commercial or industrial buildings would be demolished pending other development.

As an integral part of the transportation system, the location of any parking supply must be evaluated in like terms to the location of any roadway or transit line.~~ If a temporary parking lot does not meet the criteria for location of parking facilities, it may have a disruptive effect on the transportation system similar to a major street reconstruction and resultant detour or to temporary suspension of transit service.~~

~~The scattered locations of parking lots militate against the possible provision of shuttle transit. In addition,~~ Where parking lots are temporary uses on land in the development process, autos are attracted to these areas,~~ that are already impacted, or worse, where auto use conflicts with transit routes. Such temporary parking also tends to create~~ creating a travel pattern based on expected availability of parking, which creates even greater difficulties whenever such a temporary facility is eventually terminated.

POLICY 3

Maximize the efficient use of land devoted to parking by consolidating adjacent surface lots and garages into a parking structure, possibly containing residential, commercial or other uses.

This applies both to existing and planned parking facilities. Surface parking ~~as a temporary use pending some more intensive use of the property~~ may be particularly undesirable when it results in the demolition of needed housing or inexpensive industrial space suitable for incubator industry.

POLICY 4

Restrict long term automobile parking at rapid transit stations in the city in favor of development of effective feeder ~~bus~~ transit service.

All of the rapid transit stations in San Francisco are located in densely developed downtown areas or in residential or shopping areas where additional automobile impacts are undesirable. These stations are located in such a manner that they may generally be reached by San Francisco residents either by connecting transit or by walking. The commuter use of the automobile to reach a rapid transit station in San Francisco should be discouraged.~~ Parking impacts which have occurred around outlying stations may be lessened by provision of long term facilities, however,~~ While it is desirable to provide bicycle storage and parking facilities at rapid transit stations, long-term automobile parking facilities are undesirable because such facilities would attract automobile traffic and otherwise be disruptive to the neighborhoods where they would be located.~~ Access to BART should generally be provided by transit.~~

POLICY 5

In any large development, allocate a portion of the provided off-street parking spaces for compact automobiles,~~.~~
~~The trend toward smaller, more fuel efficient vehicles can be reflected and encouraged in new development with a concurrent savings in the amount of land and space required for the parking of automobiles. The provision of parking spaces for compact and subcompact automobiles and motorcycles should be~~**vanpools, bicycles and motorcycles commensurate with standards that are, at a minimum, representative of their proportion of the city's vehicle population.**

POLICY 6

Make existing and new accessory parking available to nearby residents and the general public for use as short-term or evening parking when not being utilized by the business or institution to which it is accessory.

A major reservoir of parking spaces, accessory to particular businesses or institutions, is currently in use only during the daytime working hours of those particular businesses and remains vacant and inaccessible at other times. In many instances this space could be used in the evening by residents of the immediate neighborhood or their guests, and in the evening and on weekends by visitors and patrons of adjacent businesses that operate during those hours. ~~Also, businesses or new developments with evening, night or weekend users could share the existing accessory parking of nearby weekday businesses.~~

POLICY 7

Limit and screen from view parking facilities over the water, and near the waters edge where such parking interferes with public access.
In order to improve physical and visual access to the Bay, non-maritime parking should be located inland away from the waters edge and away from areas of intense pedestrian activity. Where possible, existing parking facilities on or near the waters edge should be removed or relocated.

OBJECTIVE 2

ESTABLISH PARKING RATES AND OFF-STREET PARKING FARE STRUCTURES TO REFLECT THE FULL COSTS, MONETARY AND ENVIRONMENTAL, OF PARKING IN THE CITY.

POLICY 1

Set rates to encourage short-term over long term automobile parking.

POLICY 2

Where off-street parking near institutions and in commercial areas outside downtown is in short supply, set parking rates to encourage higher turnover and more efficient use of the parking supply.

POLICY 3

Encourage equity between drivers and non-drivers by offering transit fare validations and/or cash-out parking programs where off-street parking is validated or subsidized.

OBJECTIVE 3

LIMIT PARKING IN DOWNTOWN TO HELP ENSURE THAT THE NUMBER OF AUTO TRIPS TO AND FROM DOWNTOWN WILL NOT BE DETRIMENTAL TO THE GROWTH OR AMENITY OF DOWNTOWN.

POLICY 1

Discourage new long-term commuter parking spaces in and around downtown. Limit the long-term parking spaces to the number that already exists.

POLICY 2

Locate any new long-term parking structures in the areas peripheral to downtown. Any new peripheral parking structures should be concentrated to make transit service convenient and efficient, connected to transit shuttle service to downtown, and provide preferred space and rates for van and car pool vehicles, bicycles and motorcycles.

POLICY 3

Encourage short-term use of existing parking spaces within and adjacent to downtown by converting all-day commuter parking to short-term parking in areas of high demand.

POLICY 4

Where residential streets that are adjacent to or within the downtown area are used for on-street, long-term commuter parking, implement preferential parking programs for residents and other measures to promote short-term parking and discourage long-term commuter parking.

POLICY 5

When the priority functions of service vehicle access and pedestrian movement are sufficiently accommodated on downtown alleys, short-term parking especially designated for motorcycles should be provided.

OBJECTIVE 4

CONTAIN AND LESSEN THE TRAFFIC AND PARKING IMPACT OF INSTITUTIONS ON SURROUNDING RESIDENTIAL AREAS.

~~Institutions such as medical centers and colleges are major employment centers and are usually located in the city's residential areas. Employment levels in medical and other health services~~

~~are expected to increase significantly in the future.~~ Many ~~of these~~ institutions already have physical expansions planned, and the employment levels projected indicate that institutions will have even greater traffic and parking impacts on residential areas unless strong efforts are made to accommodate the employment growth by transit. ~~Alternatives to expansion of institutions on site may have to be explored where significant traffic and parking impacts on surrounding residential areas cannot be avoided.~~

POLICY 1

Limit the provision of long-term automobile parking facilities at institutions and encourage such institutions to regulate existing facilities to assure use by short-term clients and visitors.

Although there are some trips to institutions which are appropriately made by automobile, especially for medical appointments and hospital visits, work trips should be made by transit wherever possible. Institutions should take effective measures to reduce the amount of traffic and parking generated by the development and should develop and implement transit action plans accordingly. In addition to the criteria for new parking facilities in Objective 1, Policy 1, new parking provided by institutions should be carefully designed to favor short-term ~~or carpool~~, carpool or bicycle parking for trips which cannot reasonably be made on transit.

~~In some cases where institutions have parking facilities where a high short-term fee is charged, visitors seek parking on adjacent streets rather than pay the fee. In order to insure that the facilities rather than the street are used, institutions should price short-term parking low enough to encourage short-term visitor use.~~

POLICY 2

Protect residential neighborhoods from the parking impacts of nearby traffic generators.

Residents should be given preference in the use of residential neighborhood on-street parking spaces where traffic congestion and parking shortages generated by institutions, schools, shopping districts, recreational facilities or rapid transit stations have contributed to the deterioration of residential environment. The preferential parking concept may ~~provide relief for such residential neighborhoods by instituting a regulatory scheme which would~~ reduce parking congestion in residential neighborhoods caused by long-term non-residential parkers, facilitate residents access to on-street parking close to their homes, provide for access to convenient parking by visitors of neighborhood residents and allow convenient parking for vehicles being used by people providing essential services to neighborhood residents.

OBJECTIVE 5

RELATE THE AMOUNT OF PARKING IN RESIDENTIAL AREAS AND NEIGHBORHOOD COMMERCIAL DISTRICTS TO THE CAPACITY OF THE CITY'S STREET SYSTEM AND LAND USE PATTERNS.

The continuing level of vehicle ownership by city residents indicates the need for improved transit services throughout the city. It also indicates the need for parking facilities is continuing and

raises serious questions about the level of automobile ownership which can be supported by the street and parking system. Since much of the city's housing, especially in the more densely developed areas, was built prior to the time when the automobile became the dominant mode of travel, off-street parking spaces do not exist in adequate numbers. The size of many streets and the need to provide free flows for traffic limits the number of on-street spaces. ~~Increased parking facilities, especially off the street, need to be made available. However,~~Just as the street system cannot accommodate all potential traffic, so the city cannot provide for an unlimited level of automobile storage. A reasonable level must be provided for and measures ~~must be taken~~ should be considered to discourage vehicle accumulations beyond that level.

POLICY 1

Regulate off-street parking in new housing so as to guarantee needed spaces without requiring excesses and to encourage low auto ownership in neighborhoods that are well served by transit and are convenient to neighborhood shopping.

Some neighborhoods have large numbers of persons using transit to go to work and have significant numbers of no-auto or one-auto households. This pattern should be encouraged and reflected in off-street residential parking requirements.

Use of common parking facilities for several buildings should be encouraged where existing buildings can be used for this purpose in nearby commercial areas. There may be a place for public provision and leasing of long-term resident parking in already developed parking facilities in high-density neighborhoods.

POLICY 2

Use existing street space to increase residential parking where off-street facilities are inadequate.

Local streets are of such width in many areas that improved parking conditions can be obtained by shifting from parallel to diagonal or perpendicular parking without a major investment. ~~This policy has long been followed on steep hills for safety reasons and can be applied where streets are flat in order to maximize the use of existing street space.~~ Care must be taken, however, to avoid conflicts with transit operations and safe bicycle movement, and to ensure that the street is more than a parking lot. Proper landscaping is required to prevent lights from shining into dwellings at night and breaks in rows of cars should be provided to avoid the monotony and unsightliness of unending rows of vehicles.

~~There is a limit to the number of automobiles the city can accommodate, either moving or in place, especially in the densely populated neighborhoods. The possibility of a new, higher tax on second and third cars and stricter enforcement of on-street parking regulations should be explored.~~

POLICY 3

Permit minimal or reduced off-street parking for new buildings in residential and commercial areas adjacent to transit centers and along transit preferential streets.

Where there is a high concentration of transit service, as in the northeastern portions of the city, census tract figures indicate that residents are less likely to own automobiles and more likely to use public transit. High-density housing and housing for the elderly are already eligible for reductions in the standard provisions for off-street parking, enabling the building sponsors build more economically. These buildings should be encouraged where transit service is plentiful and comprehensive.

POLICY 4

Where parking demand is greatest in city neighborhoods, consider wide-scale transit improvements as an alternative to additional parking garages as part of balanced solution.
A great demand for parking in city neighborhoods indicates that available transit services are insufficiently attractive or convenient. Transit improvements could not effectively relieve or replace the demand for expanded off-street parking unless they were extensive and well-connected to local crosstown and radial transit lines and regional transit.

POLICY 5

Minimize the construction of new curb cuts in areas where on-street parking is in short supply and locate them in a manner such that they retain or minimally diminish the number of existing on-street parking spaces.
It is desirable to maintain a balance in the supply of adequate on- and off-street parking. The creation of curb cuts to increase the supply of off-street parking often deprives the neighborhood of a community on-street parking space in exchange for a private one. New buildings may be designed so that entrances to off-street parking are pooled or configured to minimize curb cuts and preserve the supply of on-street parking.

OBJECTIVE 6

MEET SHORT-TERM PARKING NEEDS IN NEIGHBORHOOD SHOPPING DISTRICTS CONSISTENT WITH PRESERVATION OF A DESIRABLE ENVIRONMENT FOR PEDESTRIANS AND RESIDENTS.

~~Although a primary goal is to encourage improved transit service to shopping areas, and the emphasis should continue on transit as the means to travel to shopping districts,~~

POLICY 1

Provide convenient on-street parking specifically designed to meet the needs of shoppers dependent upon automobiles.
Automobile use is often necessary for shopping trips involving the purchase of bulky items such as groceries or where there are many stops to be made at different places far apart. Where additional short-term parking is demonstrated to be needed and essential to a shopping district, it should be provided at the least economic and environmental cost to the neighborhood and the city.

POLICY 2

Assure that new neighborhood shopping district parking facilities and other auto-oriented uses meet established guidelines.

~~Some neighborhood shopping facilities serve only residents of the immediately surrounding areas, most of whom travel on foot. Others tend to attract consumers from adjacent communities or in low-density parts of the city from a distance not easily traversable on foot.~~

~~Proposed new parking facilities should be carefully considered not only in terms of how much demand they can satisfy, but also in terms of the impact of that facility on the environment of the shopping district. A poorly designed or located facility could be worse for a shopping district than no facility at all.~~ In addition to the criteria for new parking facilities in Objective 1, Policy 1, the following guidelines should be considered in the review of proposed new facilities in Neighborhood Commercial Districts.

- Parking Facilities should be located to provide convenient access to desired shopping destinations. However, they should be located in such a manner that ~~they~~ lessens the amount of traffic traveling through the district, ~~and~~ does not disrupt the continuity of the shopping district, and that neither gives it priority over nor impedes access to destinations for persons arriving by transit, bicycle or on foot.

- Multiple use of parking structures and lots should be provided wherever feasible. The use of roof tops of garage structures as game/play areas in densely populated neighborhoods, use of surface parking lots as tennis courts or soccer fields on days when the shopping districts are closed, or use of the facilities for resident parking in the evening are all possibilities which should be considered.

- The location and configuration of curb cuts and entrances to off-street parking should be designed to minimize safety hazards and access conflicts to pedestrians, transit operations and bicyclists, and to be sensitive to the design and scale of the urban streetscape.

URBAN GOODS MOVEMENT
(new text)

This section is aimed at improving the movement of goods (as distinct from people) by all modes to, from, within, and through San Francisco. Although the Transportation Element is primarily focused on person movements, much of our public infrastructure for transportation serves the movement of both people and freight. Managing urban goods movement serves to enhance economic development, reduce traffic congestion, and contribute to other social goals. Adverse effects such as traffic accidents, noise, vibration, emissions and truck intrusion into residential areas are concerns which must be addressed.

These objectives and policies highlight issues related to intra-urban goods transport internal to San Francisco. This section also distinguishes between traffic with both origin and destination in the city's boundaries, such as unloading/pickup activities downtown, and goods transport of greater distances. The movement of goods to and from the San Francisco Bay Area involves other transportation modes in addition to roads, including intermodal freight terminals at port piers and backlands, rail terminals and airports. San Francisco in particular, with its peninsular location, poses complicated challenges in the development of routes, facilities and access points. Enhanced connections to consolidated intermodal terminals, multiple rail servers and regional highways are key to the efficient movement of goods.

Across the country and, in particular, for San Francisco, future trends in the movement of urban freight can be characterized as follows: An increasing suburbanization and containerization of urban freight warehousing; a growth in location dependent service industries; policy debate on the preservation of industrial zones; a move toward "just in time" production methods; customers demanding higher levels of capacity, frequency, punctuality, reliability and flexibility to accommodate the higher value of goods which modern industry is producing; a proliferation of commercial and courier vehicles; telecommuting and its potential impacts on the demand for courier and messenger services; increasing awareness and regulation of hazardous materials transport; rising costs of waste disposal; increased importance of infrastructure upgrades and the associated logistical problems; accelerated pressure for parking and curbside facilities; and a greater community concern about the impacts of the freight industry.

OBJECTIVE 1

PROMOTE FREIGHT DELIVERY/PICKUP TRAFFIC AS NECESSARY FOR THE ECONOMIC VITALITY OF SAN FRANCISCO AND THE BAY REGION.

POLICY 1

Support urban goods movement networks in San Francisco, especially in the areas reserved for industrial development and in neighborhood commercial districts.

POLICY 2

Coordinate with appropriate governmental agencies to anticipate and accommodate the needs of both local and through freight traffic in future growth areas in San Francisco.

OBJECTIVE 2

CREATE A PHYSICAL AND ECONOMIC ENVIRONMENT CONDUCIVE TO THE EXPANSION OF SAN FRANCISCO'S INDUSTRIAL, MARITIME, AND AIRPORT ACTIVITIES BY ENSURING TRUCK/SERVICE VEHICLE AND RAIL ACCESS AND EGRESS TO THESE USES.

POLICY 1

Provide sufficient curbside and off-street facilities to rail, piers and air terminals where freight movement is dominant, and particularly where it conflicts with other transportation modes and functions.

POLICY 2

Improve and maintain intermodal rail freight handling capacity to the Port and other industrial areas by providing an Illinois Street Rail Bridge and access improvements to the rail tunnels that accommodate double-stack container freight.

POLICY 3

Enhance access and circulation between highways, freight facilities and intermodal transfer points on the waterfront for trucks and other service vehicles.

POLICY 4

Promote water-based transportation such as freight ferries and waterfront shuttles between San Francisco and other waterfront terminals around the Bay to supplement land-based modes of freight travel.

OBJECTIVE 3

DEVELOP AND MAINTAIN SELECTED MAJOR AND SECONDARY ARTERIALS EFFICIENT AND DIRECT ROUTES FOR TRUCKS/SERVICE VEHICLES INTO AND THROUGH SAN FRANCISCO WITHOUT DISTURBING NEIGHBORHOOD AREAS AND INHIBITING THE SAFE MOVEMENT OF TRANSIT VEHICLES, BICYCLES AND PEDESTRIANS.

POLICY 1

Improve the existing regional network of truck routes by making designated routes in San Francisco convenient for non-local freight trips with the aim of making the routes direct and connected to other routes.

POLICY 2

Reduce unnecessary truck trips through San Francisco and out-of-direction circulation movements by promoting viable alternate truck routes and access across bay bridges that are not as subject to traffic congestion as the Bay Bridge and the Golden Gate Bridge.

OBJECTIVE 4

MAKE FREEWAY AND MAJOR SURFACE STREET IMPROVEMENTS TO ACCOMMODATE AND ENCOURAGE TRUCK/SERVICE VEHICLE TRAFFIC IN INDUSTRIAL AREAS AWAY FROM RESIDENTIAL NEIGHBORHOODS.

POLICY 1

Establish and maintain advisory truck routes, with clear signage, between industrial areas and freeway interchanges to enhance truck access and to clearly and visibly attract truck traffic away from residential neighborhoods.

POLICY 2

Accommodate heavy vehicles with extra-legal loads on major truck routes by ensuring vertical clearances, appropriate intersection design for maneuvering and providing signal timing to allow smooth truck progression.

POLICY 3

Implement measures to reduce adverse affects from trucks/service vehicles and rail traffic by enforcing restrictions on certain routes, specific areas or times of day.

OBJECTIVE 5

ENFORCE A PARKING AND LOADING STRATEGY FOR FREIGHT DISTRIBUTION TO REDUCE CONGESTION AFFECTING OTHER VEHICULAR TRAFFIC AND ADVERSE IMPACTS ON PEDESTRIAN CIRCULATION.

POLICY 1

Provide off-street facilities for freight loading and service vehicles on the site of new buildings sufficient to meet the demands generated by the intended uses. Seek opportunities to create new off-street loading facilities for existing buildings.

POLICY 2

Discourage access to off-street freight loading and service vehicle facilities from transit preferential streets, or pedestrian-oriented streets and alleys by providing alternative access routes to facilities.

POLICY 3

Off-street loading facilities and spaces in the downtown area should be enclosed and accessible by a private driveway designed to minimize conflicts with pedestrian, transit and automobile traffic.

POLICY 4

Driveways and curb cuts should be designed to avoid maneuvering on sidewalks or in street traffic, but when crossing sidewalks they should be only as wide as necessary to accomplish this function.

POLICY 5

Loading docks and freight elevators should be located conveniently and sized sufficiently to maximize the efficiency of loading and unloading activity.

POLICY 6

Encourage consolidation of freight deliveries and night-time deliveries in the downtown C-3 zoning districts to increase efficiency of freight movement and reduce congestion.

POLICY 7

Strictly enforce yellow and special truck loading zones throughout San Francisco to facilitate delivery/pickups and reduce traffic congestion caused by double-parking.

POLICY 8

Provide limited curbside loading spaces to meet the need for short-term courier deliveries/pickup.
One of the major sources of transit operation and traffic conflicts is the extent of double-parking by courier services and other short-term delivery vehicles. Places of business that use courier service extensively should accommodate deliveries, pick-ups and drop-offs through the provision of on-street or off-street parking and loading space.

POLICY 9

Where possible, mitigate of the undesirable effects of noise, vibration and emission by limiting late evening and early hour loading and unloading in retail, institutional, and industrial facilities abutting residential neighborhoods.

This policy presents conflicts that need to be worked out on a case-by-case basis as a balance between the livability of these residential neighborhoods and goods movement activity. In certain areas, deliveries may be confined to early evening post-peak hours without difficulty, but on the other hand, intensive truck traffic and freight rail movement must occur during off-peak hours because of congestion on highways and shared passenger/freight rail facilities during the day.

N

FREIGHT TRAFFIC STREET RESTRICTIONS

Scale : 1" = 1.25 miles

LEGEND

- Restricted Streets

———————————— Streets restricted by weight of truck

▬▬▬▬▬▬▬▬▬▬▬▬ Weight restriction: 5 1/2 tons

GM6